

September

NATION'S

1944

# BUSINESS

**DEMobilizing  
LEND-LEASE**

**A SMALL BUSINESS MAN  
DISCUSSES SMALL  
BUSINESS**

**INFLATION—WHO GETS  
HURT AND HOW**



GENERAL LIBRARY  
UNIVERSITY OF MICHIGAN  
ANN ARBOR MICH

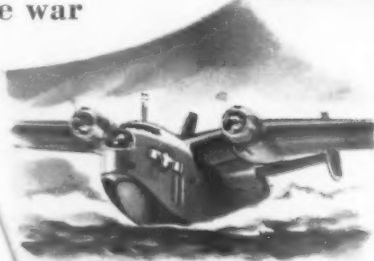
# Plastic Bubble

spells trouble for Jap and German aircraft  
It's the **MARTIN** Aerial Gun Turret

... one of the most destructive  
weapons of the war



Thrust a broomstick from the window of a car doing 60 miles an hour and you'll have an idea of what aerial gunners were up against before the advent of power-operated turrets. With a wind of two to three hundred m.p.h. pushing against their gun barrels, accuracy was impossible.



Realizing that lack of accurate defensive fire made our bombers vulnerable, Martin, in 1937, developed America's first power gun turret, a hydraulic model for the Navy's PBM-1 patrol bomber. Accurate, responsive to the slightest touch, it mounted heavy machine guns.



Then in 1940 General Arnold, Chief of the Army Air Forces, proclaimed power-operated turrets a "must" for Army bombers. Again Martin was first to respond, with a new electric powered turret. Mounting two .50 caliber machine guns, it is one of the war's most lethal weapons.



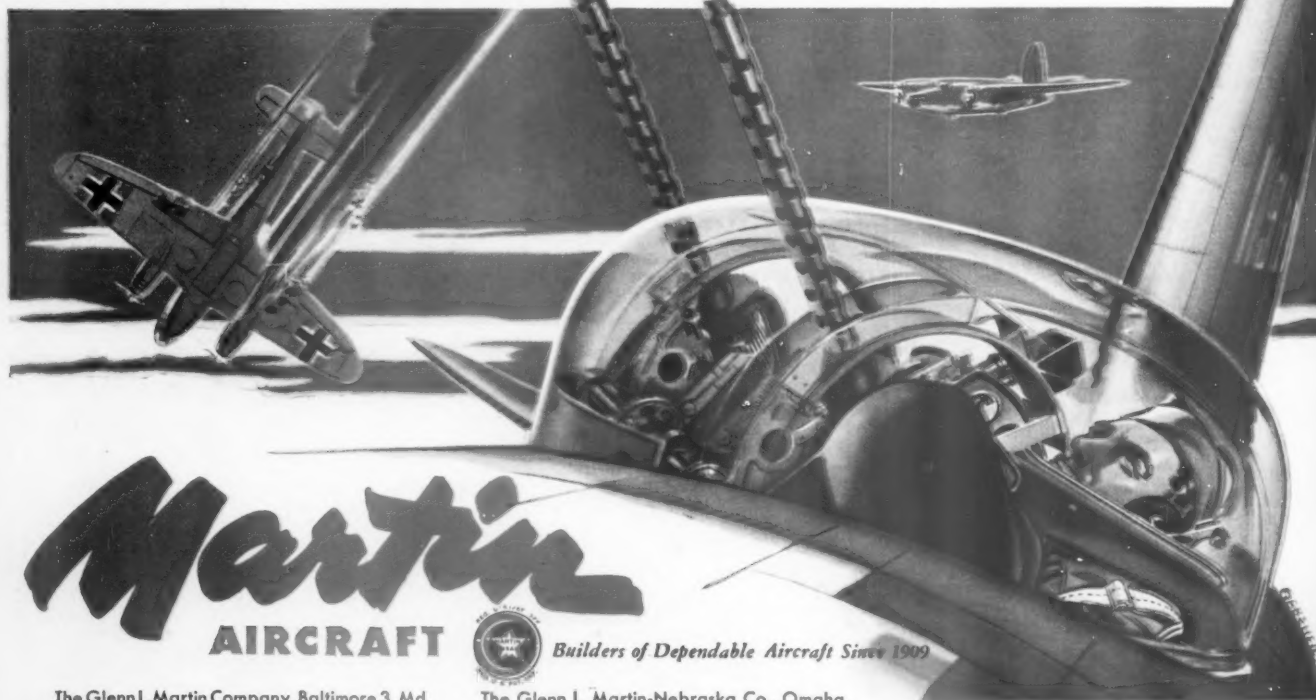
Blasting the Axis on every front, Martin electric turrets are mounted on Martin Marauders, Liberators, Martin Baltimores, A-20 Havocs, a series of Flying Fortresses, Vega Venturas. Allied gunners in Martin turrets have shot down an estimated 3,500 enemy aircraft, and are adding to the score every day.



On bows and decks of Martin Mariners, PB2Y4 Coronados, PBM-1's and PB2Y3's, the Martin hydraulic turret is in action the world over. German subs have felt its blast, Jap ships been set afire or sunk, enemy installations raked, Axis aircraft destroyed. Martin turrets are doing a job for the Navy!



The same engineering skill that produced these great gun turrets also gave America the 72-ton Martin Mars. Now in regular over-ocean service with the Navy, this giant transport will soon be joined by 20 sisterships. She's the plane of tomorrow, flying today!



# Martin

**AIRCRAFT**



Builders of Dependable Aircraft Since 1909

The Glenn L. Martin Company, Baltimore 3, Md.

The Glenn L. Martin-Nebraska Co., Omaha



# Nation's



# Business

PUBLISHED BY

CHAMBER OF COMMERCE OF THE UNITED STATES

VOL. 32

SEPTEMBER, 1944

NO. 9

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# LST's

are our  
business,  
too!



For more than two years, we have been building deck houses, superstructures and hull sections for LST boats—hundreds of which have been launched in the Ohio River at Louisville and are in overseas service wherever American forces have invaded foreign soil.

Our war effort in this direction has in no way interfered with the manufacture of essential dust control equipment and air filters for war industries, delivery of air intake filters for airplane engines and special Roto-Clones for ventilating tanks . . . not to mention other important items regularly supplied to war agencies and manufacturers.

Send for this FREE book



If you have a dust problem, write us for a copy of "AAF in Industry" which describes our complete line of air filtration and dust control equipment. There's no obligation.

**AMERICAN AIR FILTER CO., INC.**

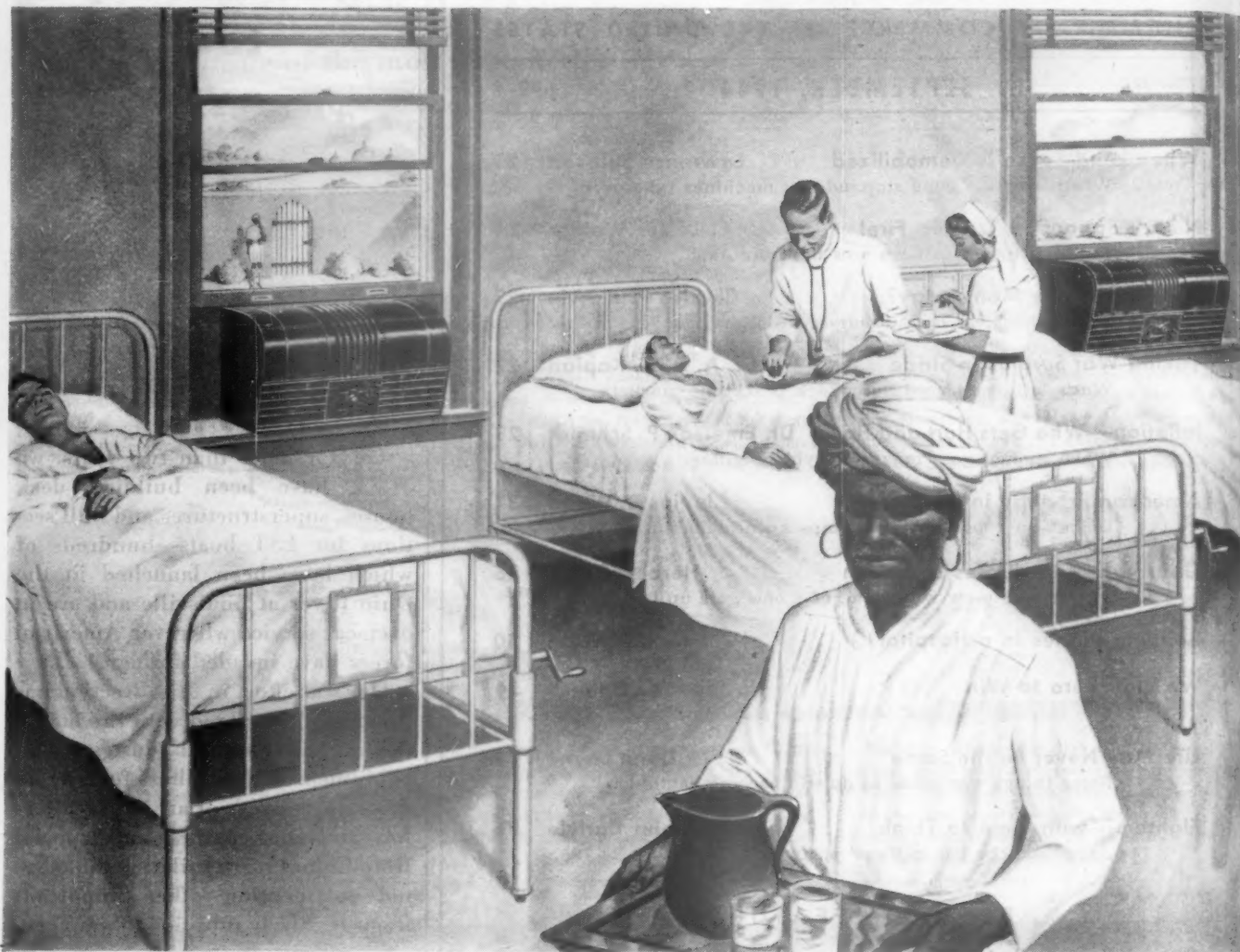
109 Central Ave., LOUISVILLE 8, KY.

In Canada: Darling Bros., Ltd., Montreal, P. Q.



**ENGINEERED DUST CONTROL**

# IN THE NAME OF HUMANITY *Less Humidity!*



**"COMFORT" AIR CONDITIONING** was not the war casualty you might think. It's still getting around . . . to those whose need is truly great. For our fighting men, it's getting around in a global way!

The same York portable air conditioning units that might otherwise be making life easy in Mr. and Mrs. Civilian's office or home are off to such far-flung fighting fronts as tropical India, where temperatures of 110°F. and above, and humidity of 80% and more, are common. There, in British Army hospitals, these compact self-contained air conditioning units guard against perspira-

tion-borne infection in soldiers' open wounds. They also relieve suffering and discomfort . . . speed the convalescence of American and British wounded and sick.

Air conditioning, curiosity of the twenties, star attraction of the thirties, now enters a grimmer decade to relieve suffering and hasten healing. For those at York who, in this short span, resolutely helped to pioneer and develop air conditioning to its present usefulness, there could be no greater reward.

York Corporation, York, Penna.



## **YORK REFRIGERATION AND AIR CONDITIONING**

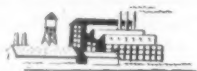
HEADQUARTERS FOR MECHANICAL COOLING SINCE 1885



Industry  
SELECTS  
SANTA CLARA  
COUNTY

*Here's Why!*

Choice industrial locations are still available...on spur tracks and main highways...at the population center of the Pacific Coast.



Industry is decentralized in Santa Clara County. Plants are "detached"...and workers lead healthful outdoor lives near their work.



Taxes invite industry. The tax rate compares favorably with any industrial area in the nation.



There is a wealth of labor...skilled and unskilled. And the labor record is one of complete co-operation.



Post War Pacific Coast supplies ALL of the facts about this young, aggressive industrial area. Write for it on your business letter-head.



DEPT. N

**SAN JOSE CHAMBER OF  
COMMERCE**

SAN JOSE 23, CALIF.

**SANTA CLARA  
COUNTY** *California*



The population  
center of the  
Pacific Coast

# Through the Editors' Specs

## September morn

ALTHOUGH October has always had a good press—"October's bright blue weather," "October's nut brown ale," etc.—September has always seemed to be a kind of poor relation among the months. Perhaps that is because, as children we always dreaded September's arrival because it meant going back to school.

To adults, September means that vacation is over and it's time to think about taking down the screens and getting the furnace cleaned out.

In spite of these things, September through the years has managed to build up a pretty good record. Henry George, Eugene Field, LaFayette, Queen Elizabeth, Richelieu, William Howard Taft, Samuel Johnson, John Marshall, Samuel Adams, Clemenceau, Lord Nelson and Pompey all chose to be born in that month.

Henry Hudson discovered the Hudson River 335 years ago in September, the First Continental Congress began on September 5, 170 years ago; Perry won the Battle of Lake Erie in September, "Old Ironsides" was launched, Balboa discovered the Pacific Ocean, and our Constitution was finally adopted—all in September.

We are not sufficiently psychic to foretell what this September will bring but we can hope that this September may add another notable date to the string.

## Dog days

CERTAIN September dates have already been set aside for an observance of sorts. Starting Sept. 17, which is Constitution Day, we will have "National Dog Week." For a while it seemed that an amusing comment might be built around the idea that the old saying "Every dog has his day" had now been extended, but the man to whom that was suggested, could not seem to get into the mood.

He lives in Virginia very near Ft. Myer where military custom prescribes that the sunrise gun be fired at 6 a.m.

in summer. The shot wakes his dog which then demands to be taken out. Our man is not a joyous early riser.

"All I can think of," he told us, "is, if Dog Week means that my dog must be kind to me, I'm in favor of it."

## Reward for service

A MAN WE KNOW went to war 27 years ago. When Congress passed the Soldiers' Bonus Bill, he took his bonus—some \$1,300—in bonds which come due next year, plus interest.

When he collects, he plans to add \$200 in cash to the amount of the bonus and turn the whole thing back to the federal Government to pay the second half of his "unforgiven" 1943 income tax. But he's puzzled:

If a hard-hearted Congress had declared no bonus, if a tight-fisted administration had given more social planners the fish-eye, maybe, he says—barely maybe—there would have been no tax to unforgive and he would be \$200 ahead.

## British economics

IN SPEAKING of Britain's White Paper on Employment Policy, *The Economist* (Brettenham House, Lancaster Place, Strand, London, W.C.2. Annual Subscription Three Pounds.), under the title of *Balanced Budgets?* said:

"But, the document hastens to add, lest it should be accused of heresy, it 'certainly does not contemplate any departure from the principle that the Budget must be balanced over a longer period.'

"Up to this point, then, the meaning would appear to be that the Budget must be balanced over a longer period, but that it can be unbalanced in any particular year, provided it is done accidentally. . . .

"It would be wrong to be too severe on the Treasury for thus wrestling with its conscience in public. It is a very good thing that the Treasury has a conscience; it is its duty to adhere, even with some blindness, to the faith that is in it. One of the glories of the British system of



## It takes 10 tons a day to keep this gun in action!

**T**O put a single 155 mm. gun in action at the front and maintain it for a year, requires a total of 3603 ship-tons.

That's an average of nearly 10 tons of transportation a day for each gun!

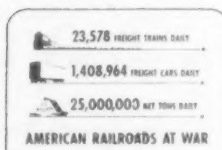
And, this doesn't include transportation of the 134 officers and men

in the battery, and their supplies.

As thousands of these big guns roll up to the front to blast enemy positions, the job of Erie and other American Railroads becomes bigger and bigger.

For it is the immediate responsibility of your railroads to keep not only these guns and supplies, but hundreds of thousands of other items, rolling from the production lines to the battle lines.

With the continued help of the public, shippers, and government agencies, your railroads will keep the vital war loads rolling on to hasten the day of victory.



BUY WAR BONDS AND STAMPS

# Erie Railroad

ONE OF AMERICA'S RAILROADS—ALL UNITED FOR VICTORY



government is that it does not often get into financial difficulties. The list of monarchs and republics, kings and cabinets who have led their lofty causes to irreparable ruin through inadequate attention to the lowly logic of the account book is too long and too conclusive to encourage any departure from prudence today.

"One of the many respects in which Governments are in a less fortunate position than high heaven is that they cannot reject the lore of nicely calculated less and more. . . .

"Budgets can, indeed, be balanced. . . . And all the rules of sound finance can be allowed to go hang—provided that the authors of such a policy are also prepared to go hang when the consequences become visible."

## Why men work

IN A recent address, William R. Boyd, Jr., President, American Petroleum Institute, raised the question *Is There Any Better?* and then went on to say:

"There may be other incentives to make men work and risk their funds, but so far the human race has never discovered one more effective than the hope of profit.

"When Colonel Drake and George H. Bissell and William Barnsdall and the other early pioneers of the petroleum industry risked their energies and their money on the hazardous speculation of drilling holes in the ground, they did so to make a profit.

"Out of their speculation has come a vast American industry which not only gives employment to more than a million people, but which provides the basis for many other vast industries. Not everybody makes a profit out of oil, of course.

"As a matter of fact, since 1859 much more money has been expended on the drilling of dry holes than has been recovered by the sale of crude oil. But it is the possibility of profit that has built this industry, just as that same thing has built every other American industry. When that possibility is destroyed, men will cease to work."

Whether history decides that this war has proved anything else or not, it has certainly proved that point. Hitler's first mistake was to believe that men could be driven to produce more rapidly than Americans could produce of their own free will.

## Superbrain

INTERNATIONAL Business Machines Corporation has announced the production of a mechanical superbrain—a machine which will perform, accurately and quickly, mathematical calculations heretofore left undone because life was too short.

The machine was invented by Howard H. Aiken, an associate professor of applied mathematics at the Harvard Graduate School of Engineering, who now is on leave to the Navy, where his machine is being used. Commander

Aiken was not an inventor. He was just a math prof who looked for a short and easy way to complete a lot of long, monotonous calculations which were necessary for a thesis on astronomy.

The superbrain will be put to many peace-time uses in astronomy, engineering and construction.

Some enthusiastic planners even believe it will balance the little woman's checkbook.

### Cocktails for the Axis

AS THE LIQUOR industry returns to civilian status long enough to assuage the national thirst briefly, some interesting figures are revealed:

For each day of this year, the synthetic rubber industry will use enough alcohol to make 174,000,000 highballs; for each bottle of cheer that you didn't take home, a 3-inch antiaircraft shell was built to explode in the enemy's face; for each cocktail that wasn't served, some soldier was able to toss a grenade into a sniper's hideout.

Maybe, if Hitler and Japan had known when they invited us to this party that our liquor was so potent they would have been better prepared for the headache that was bound to follow.

### Preparing for peace

ALONG that same line, our contemporary, *Women's Wear Daily*, has prepared a 30-point program for business houses which seems to cover all eventualities when the land gives itself over to the celebration of V-Day.

Among the suggestions are: board the windows; hide valuable merchandise; prepare signs, ads and radio announcements of store closing in advance; get delivery trucks back to the warehouses; route all elevators and escalators down only to clear the store, use air raid organizations, signals and wardens to help handle the crowds.

The only addition we can think of to the *Women's Wear Daily* agenda would be to disassemble the establishment quickly and hide the pieces in the grass.

Probably that is not practical, but almost any precaution less than that will be justified.

As a people who habitually celebrate football victories by joyously fighting with policemen for the privilege of tearing down the goal posts, we are going to be completely uninhibited when it comes time to cheer a team that came from behind to win the toughest game in history.

### Light in the dark

A VERSIFIER we know once wrote, with more truth than poetry:

It's little things that make life sweet,  
Like going to bed with uncold feet.

One of the little things we intend to enjoy in the postwar world, when not up in our helicopter, is an illuminated switchplate put on the market by Tom

## EXAMPLE OF *Service*:



A customer writes: "... we have achieved a production rate of 500 L.V. T. amphibian tank axles per day, which is a record in production, considering that these axles are ground to .0006 of an inch tolerance.

We employ 50 people, and this is a rate of 10 axles per day per man. We achieved this record by using Cities Service grinding oil for our grinding operation, Chillo #93 for use in drilling and tapping—and your Sentry #2 as spindle oil."

More and more, it's service that counts...

*Cities Service*  
means good service!



CITIES SERVICE OIL COMPANY

ARKANSAS FUEL OIL COMPANY



# FACT OR FICTION?

A 47 SECOND TEST ON

## ICE

USED ON THE "MAIN STREET OF THE NORTHWEST"



**Q. Trained beaver build dams in mountain streams to provide ice used in Northern Pacific refrigerator cars. Fact or fiction?**

**A. Fiction . . . but N. P. crews do exactly that, to help supply 180,000 tons of ice used yearly on the system.**



**Q. Ice used in N. P. passenger cars alone could supply 25 lbs. daily for more than 4,000 home refrigerators. Fact or fiction?**

**A. Fact. N. P. has 25 huge ice houses which supply artificial ice for diners, natural ice for refrigeration.**



**Q. Ice bunkers are novel hazards on Rocky Mountain golf courses. Fact or fiction?**

**A. Fiction. They're ice chests built into refrigerator cars. Last year Northern Pacific moved 575,000 tons of perishables under refrigeration.**



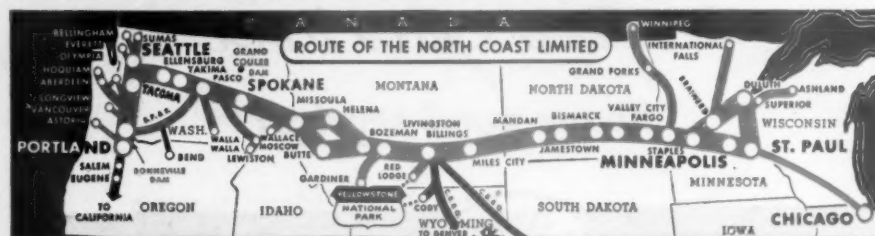
**Q. Pink waybill controlling a car means "KEEP CONTENTS IN PINK OF CONDITION." Fact or fiction?**

**A. Fact. It's a signal to every railroader, demanding top speed, frequent servicing, for iced foods in transit.**



**Q. Hundreds of expert icemen work on one U. S. Main Street. Fact or fiction?**

**A. Fact. They are N. P. ice specialists, serving major shippers of fruits, vegetables, meat, butter, other perishables on the Main Street of The Northwest.**



# NORTHERN PACIFIC

*Main Street of the Northwest*

L. Wheeler, Jr., of Columbus, Ohio. The plate is built with a little shaded pilot light which is off when the switch is on and vice versa.

Our shins quit hurting as soon as we heard about it.

## Help from readers

BY WAY of pointing up what seemed to us a cogent piece of moralizing a month or so ago, we mentioned, in passing, that a member of our staff had been unable to find an old-fashioned string-powered top for his son. We don't know what happened to the moral, but we did get a post card from Edw. L. Beary of Powersville, Mo., which brought joy to Peter Douglas, son of Lester Douglas, our art director.

"It happens that I have this item in stock," Mr. Beary wrote, "so I am sending to you by parcel post one of these tops with my compliments."

We also took recent occasion in these columns to say something about the tribulations of walking and to report that we had found no effective advice on avoiding foot fatigue. Stephen C. Singleton, manager of the Key West Chamber of Commerce, comes to our rescue on that. He writes that he has been walking for nearly 80 years now, with comfort:

"An old desert rat put me wise. Get shoes a half-size too large and wear two or three pairs of thin socks. There can be a lot of comfort obtained by this method, providing that there is no structural defect in the foot."

## Lesson to all of us

THE RECENT death of the last of the famed Cherry Sisters revived nostalgic memories for old-timers whose theatrical recollections antedate the days when people were asking "what happened to vaudeville."

The Cherry Sisters were, by popular acclaim, the world's worst actresses—so bad, in fact, that they became stars. If they ever doubted that they were stars, in fact, as well as in salary, they never let their doubts interfere with their performance.

Other actors have left stages heart-broken after a single taste of audience disapproval. The Cherry Sisters accepted it at every performance, worked behind a net which protected them from the vegetables which rowdy spectators tossed in active gestures of dramatic criticism—and never doubted that they were good.

We were mulling over the idea that there was some sort of a moral to be drawn from this particular kind of immunity to public opinion but, before we got around to put it into words, the New York Times had already said it, probably better than we were going to. It's worth passing on, and thinking over:

"They were a lesson to all of us, regardless of trade or profession, that grim determination coupled with blind ambition will not infrequently override all obstacles."





## LAMP RESEARCH IS "MOVING THE SUN"

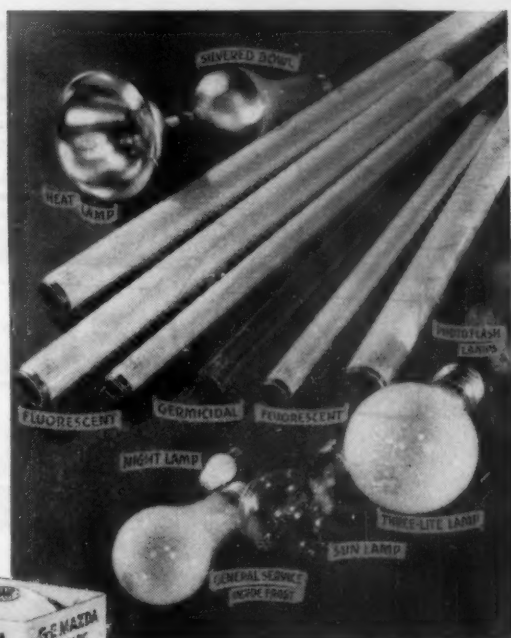
Did you ever wish you could work in a place like this—out in the cool sunshine of a June morning?

This is what General Electric lamp research is planning for you right now! Only, instead of moving you outdoors, they'll "move the sun indoors." Light that doesn't just compete with darkness, but actually compares with sunlight! Soon you'll enjoy such things as:

- Softer, more abundant light for easy seeing.
- Ultraviolet for essential Vitamin D.
- Ultraviolet that kills germs.
- Soothing, penetrating heat.

These are some of the things that G-E lamp research has for you after the war. They're way past the theory and blueprint stage. You'll have them as surely as you'll have oranges and chocolate bars. What's more, they'll be practical and easily controlled, and within the price reach of most homes and businesses.

The research that started with Edison's first lamp is still working to make new and better lamps which will give more and more light at less cost. Remember this when you buy lamps now and after the war. Look for the G-E Monogram on every lamp.



**"TO MAKE G-E LAMPS  
STAY BRIGHTER LONGER"**  
The Constant Aim of G-E Lamp Research

*Photograph taken at the New York Zoological Park.  
Office furniture and accessories by W. & J. Sloane.*

G-E MAZDA LAMPS

**GENERAL  ELECTRIC**



Hear the G-E radio programs: "The All-Girl Orchestra," Sun. 10 p.m. EWT, NBC; "The World Today" news every weekday, 6:45 p.m. EWT, CBS. **BUY WAR BONDS**



## INDUSTRY CAN USE SOME GOOD IDEAS THAT DON'T SPARK

A spark is a little thing.

Its cost to the nation in lost life and property is gigantic.

One way for industry to make jobs will be to make future jobs safer. Tools, machinery, floors, containers, anything that is used where explosion is a hazard, challenges safety engineers. Things can be made non-sparking.

Aluminum is non-sparking.

Other metals are non-sparking, too. But none of them combines the light weight of aluminum with such strength, resistance to corrosion and workability.

The floors and stairs of a flour mill, the deck of a tanker, the body of a gasoline truck, the carboy for a volatile are places where sparks should be imagineered out. Many war applications of aluminum have underlined the truth of this statement.

They are just a few of the places where aluminum and safety can be imagineered in.

We are not so wishful as to think all the world will be clothed in

Alcoa sheet. But we do know that a great many desirable things, which could be only imagined in aluminum before the war, can now be economically engineered in aluminum.

Winning the war comes first, but some aluminum is now being used for other than war purposes, as the manpower situation permits.

It takes engineering experience to pin down the imagination of Post-war Planners into job-making form. It takes experience, too, to produce the uniform quality necessary to successful mass manufacture in aluminum... the kind of manufacture the nation will need if it is to make things plentiful enough to sustain employment.

Half a century has given Alcoa that experience.

ALUMINUM COMPANY OF AMERICA,  
2125 Gulf Bldg., Pittsburgh 19, Pa.

*Non-Sparking*

ONE OF  
12 REASONS FOR USING

**ALCOA**

**ALUMINUM**



REG. U.S. PAT. & T.M.



## ...ever see a PAPER STRETCHER?



Multilith Duplicator Model 1250  
Multilith Models from \$395 to \$3,725  
Multigraph Models from \$150 to \$2,035

The paper shortage threatens to become worse. Our government *for the good of all* is calling upon everyone to reduce the use of paper. It's true that paper work of business is heavier than ever but there is a practical way for business to conserve paper by making each piece of paper stretch farther . . . and at the same time do it profitably by simplifying office operations, to save time, lighten labor, and conserve manpower.

## Multilith Systemat Duplicating is an Answer to the Problem of Conserving Paper

THE Systemat is a new development that opens up scores of ways of fitting Multilith duplicating methods into paper work of all departments of business and industry, to bring about astonishing results in time-saving, in elimination of waste of materials and motion, and in accelerating operations. A Systemat is a master sheet that comes to you with constant information or format preprinted upon it in

reproducing ink. Then variable data—words, characters, charts, and figures are written or typed in. The Systemat master goes onto the Multilith machine to produce required facsimiles, each one an original, in legible, permanent black-on-white.

Wherever repetitive operations are part of your methods, there is undoubtedly a place for Systemats to effect savings.

Let a Multigraph representative demonstrate how Systemats work and show you how they are revolutionizing paper work routines for purchasing, accounting, job orders, shipping, etc., etc. Write the Research and Methods Dept. of Addressograph-Multigraph Corporation—Cleveland 17. Sales agencies with service and supply departments in principal cities of the world.

### Multilith Systemat Saves Paper By

1. Reducing Stationery Inventories
2. Eliminating Obsolescence of Forms
3. Reducing Needs for Printed Forms
4. Permitting Consolidation of Several Forms Into a Single Form
5. Avoiding Wasteful "Over-Runs"
6. Maintaining Legibility
7. Preventing "Copying" Errors
8. Utilizing Both Sides of Paper
9. Using most Paper Stocks
10. Dispensing with Carbon Sheets

# Multigraph

TRADE-MARK REG. U.S. PAT. OFF.

SIMPLIFIED BUSINESS METHODS

Multilith, Systemat and Multigraph are Registered Trade-marks of Addressograph-Multigraph Corporation.





## Now—even diapers are engineered!

YES, even the diaper may be changed for the better ... thanks to the versatility of the rayon fiber.

Rayon, being man-made, can be tailor-made for a particular job ... can be engineered to meet widely varying human needs.

For instance, it is possible to produce a spun rayon fabric with a high degree of absorbency. This is one of the characteristics that helps make spun rayon garments for men and women more comfortable during summer heat. And this same characteristic makes pos-

sible a more absorbent diaper ... a basic improvement in this simplest and most fundamental of garments.

This is an example of a *new use* for a rayon fiber already in existence. Such developments are as much a part of the program of continuous research being carried on by the American Viscose Corporation ... as those that involve the creation of *new fibers*.

For the basic objective of this program is to bring better and better fabrics to all the people of America.

### AMERICAN VISCOSE CORPORATION

*Producer of CROWN® Rayon Yarns and Staple Fibers*

*Sales Offices:* 350 Fifth Avenue, New York 1; Providence, R. I.; Charlotte, N. C.; Philadelphia, Pa.

*Plants at:* Martins Hook, Pa.; Roanoke, Va.; Parkersburg, W. Va.; Lewistown, Pa.; Meadville, Pa.; Nitro, W. Va.; Front Royal, Va.

★ BUY UNITED STATES WAR BONDS AND STAMPS ★

•Reg. U.S. Pat. Off.



*A better way  
to buy  
Rayon Fabrics*

This identification is awarded only to fabrics containing CROWN rayon, after they have passed the CROWN Tests for serviceability.



**Engine  
No. 100,000**

Already on its way to join the other Detroit Diesel 6-cylinder engines serving in America's landing craft, tanks, trucks, bulldozers and other war equipment.

## 10 DIVISIONS OF FIGHTING ENGINES

**M**ONTHS ago the Detroit Diesel Engine Division of General Motors sent engine No. 100,000 off the production line to its war job. Many more have followed since. Measured as men, more than ten divisions of these six-cylinder Diesels are actively in the fight. They're in landing craft helping to crack Fortress Europe and to cut the Nips' string of islands. They're in tanks, trucks, bulldozers and all kinds of other equipment. The reasons are, these Diesels are

tough and dependable. They're easy to maintain. They burn inexpensive fuel oil.

They have been tried and proved in all sorts of war jobs on every battle front. And they've been found good.

With the coming of peace these engines will be available for all the applications where America will need reliable, low-cost power.



**KEEP  
AMERICA STRONG  
BUY  
MORE WAR BONDS**



ENGINES... 15 to 250 H. P. . . . DETROIT DIESEL ENGINE DIVISION, Detroit 23, Mich.

ENGINES... 150 to 2000 H. P. . . . CLEVELAND DIESEL ENGINE DIVISION, Cleveland 11, Ohio

LOCOMOTIVES . . . . . ELECTRO-MOTIVE DIVISION, La Grange, Ill.

# New? No, they're more than 4,200,000,000,000 miles old!



**I**T'S natural to think of these Goodyear synthetic rubber passenger car tires pictured here as brand-new products hustled into being by the emergencies of war.

That's true only in part — no more true, for example, than to think that rubber is all it takes to make a tire good or its performance satisfactory.

How much manufacturing skill matters, how much design and construction count in the final result, can be seen in the vast mileage differences between tires of earlier days and now, though both were made of rubber.

The fact is, what you do with rubber, or with synthetic rubber, or with cotton or rayon or other material, is of far greater importance in the long run than the material itself.

Considering this, we sharpened a pencil to puzzle out approximately how much experience is behind the big, tough, springy Goodyear synthetic rubber tires now being made available for essential civilian use.

Over our 45 years we've made more than 350,000,000 pneumatic tires—the world's record — and, taking into account the short life of early tires, we took a nominal figure as a rough average mileage.

Even on that basis, the stalwart Goodyear synthetic rubber tire your Goodyear dealer rolls out for you to look at now, has something like 4,200,000,000,000 miles of Goodyear "know-how" behind it.

Certainly that keeps it from being a "Johnny-come-lately," and if you try these tires our judgment is they'll so satisfy you that you'll call our figuring too low.

## LIFEGUARD—A PRODUCT OF GOODYEAR RESEARCH

Only sure protection against the danger of blow-outs is the LifeGuard, Goodyear's safety inner tube. It makes the worst tire failure as harmless as a slow leak. Some Goodyear dealers still have a limited supply. Get them if you can—for peace of mind, safety and economy.



**Another reason for choosing Goodyears**  
**177,810 YEARS OF EXPERIENCE—AT YOUR SERVICE**



Next to quality, competent service counts most in getting full performance from tires. Goodyear dealers comprise the largest, most efficient, veteran tire service group in the world.

Supertwist, LifeGuard—T.M.'s The Goodyear Tire & Rubber Company



**BUY WAR BONDS**  
**BUY FOR KEEPS**

## NO OTHER SYNTHETIC RUBBER TIRE OFFERS YOU ALL THESE ADVANTAGES

1. Twenty years' experience with synthetic rubber
2. A tough, sturdy carcass of prewar quality, low stretch Supertwist cord
3. Tested non-skid safety from time-proved Goodyear tread design
4. Maximum wear from scientific Goodyear design that keeps tread under compression
5. Greater experience and skill evidenced by Goodyear's record in building more than 350,000,000 pneumatic tires—millions more than any other manufacturer

# GOODYEAR

**THE GREATEST NAME IN RUBBER**



# MANAGEMENT'S

## Washington LETTER

A last minute roundup by a staff of Washington observers of government and business

RECONVERSION PRICE PROGRAM becomes effective September 1; applies to all government-owned surplus items except food and commodities bought originally for resale or stockpiling.

Controls cover not only direct government sales, but also sales by contractors or subcontractors using government-owned materials.

Sales to other government agencies are exempt; also sales to foreign relief organizations.

Five pricing formulas are submitted by OPA for surplus ceiling determinations, and local offices are authorized to fix prices where none of prescribed methods fits a particular situation.

Details of reconversion price methods are set forth in OPA Supplementary Order 94.

► **SELECTIVE SERVICE BOARDS** have been directed to re-examine all registrants deferred for educational or mental deficiencies.

New examination questionnaire will screen certain disqualified types for limited military service. Many 4-F's now employed in industry will be reclassified 1-A.

Local Draft Boards already have new educational standards.

► **EASING PRESSURE OF WAR PRODUCTION** is indicated by fact that the President's Committee for Congested Production Areas (to coordinate expansion of housing, transportation, sanitary facilities and schools) has formally terminated operations in six crowded areas—Charleston, S. C., Portland, Me., Brunswick, Ga., Newport, R. I., Pascagoula, Miss., and St. Mary's County, Md.

Only 12 metropolitan areas remain under the Committee's coordination program.

► **LIQUIDATION SALES**, made pursuant to judicial orders, or in accord with inheritance laws of the states, are exempt from OPA price control and ration regulations, under a new official interpretation.

Previously, only sales made under a specific court direction by receivers, trustees and similar officers were exempt.

Ruling is of particular importance in liquidation of farms and industrial plants in settlement of estates.

Controlled materials, however, still are subject to WPB allocation in such liquidation.

New order covers only sales made in liquidation, not sales by trustees in the normal course of business when continuing an enterprise under court order.

Details of exemptions are contained in Revised Supplementary Order 10, "Judicial Sales."

► **GOVERNMENT-FINANCED HOMES FOR VETERANS**, as provided in recent G.I. Bill, will command nation-wide support of real estate men. National Association of Real Estate Boards will convene special two-day conference in Washington September 6-7 to integrate postwar planning by local boards.

Veterans Administrator Brig. Gen. Frank T. Hines will explain administrative methods set up for home-purchase plan.

Other conference sections will explore postwar real estate policy on national airport program, the future of OPA rent controls, and the equity of income tax deductions to home-owners for depreciation.

► **FIBER SHIPPING CONTAINERS** now are under WPB preference ratings which fix relative essentiality of some 400 items normally shipped in such containers. Suppliers are required to handle all orders according to priority ratings.

Complete military priority is AAA; all basic foods rate AA-2-X; building materials AA-3; toys, AA-4; furniture, AA-5.

For complete list of priority ratings on 399 commercial items write to the Paperboard Division, WPB, Washington 25, D. C. Ask for Order P-146.

► **BAGS AND WRAPPING PAPER** were supplied at about 50 per cent of normal consumption in the first half of '44, and WPB Chairman Nelson says "the situation for last half appears still more critical."

Conservation Division is enlisting 300,000 retail grocery outlets in nation-wide campaign to "carry back the bags and wrappers." Housewives will be urged to fetch back retail wrapping fiber, and to carry unwrapped as many purchases as possible.

NOTE: A second campaign soon will be launched by WPB's Wholesale and Retail Trades Division to eliminate all frills in special Christmas wrappings; to avoid double-wraps; hold down inner stuffing; curtail all decorative effects which involve extra paper; train salespeople to enlist shoppers in "wrap-it-simply" drive.

► GRADE-LABELING EFFORTS OF OPA AND WFA suffered a sharp set-back in Comptroller General's ruling that only established trade standards may be enforced through wartime regulations.

New grade specifications of Agricultural Marketing Administration may not be used as compulsory national criteria.

► RESUMPTION OF PRIVATE CONSTRUCTION INDUSTRY is subject of special study in WPB, where material controls and priority regulations impose rigid restrictions no longer warranted by direct military demand.

Committee representing both management and labor in building industry recently received assurances from Chairman Nelson that supply lines soon would be organized for prompt civilian resumption—to avoid unnecessary time lag when manpower and materials are actually released.

Industry spokesmen say preliminaries to resumption will require at least 3 months. If these steps are put off until materials are actually at hand, a needless "transition pause" will develop.

First problem is to get builder's hardware and small equipment into production, then through wholesale distribution channels, so that retail outlets will be ready to offer tools the minute manpower is available.

► NEW OPA CODE of rules, regulations and prices is to be published by a commercial printing corporation and sold by subscription.

Present 16-volume set of OPA orders since 1941 will be condensed into a series of commodity desk books, each published on a loose-leaf basis; plus one General Desk Book covering all wartime price rules applicable generally.

New publishing arrangement will condense present 32,000 pages of accumu-

lated OPA orders into two handy desk volumes for each major commodity. (Rent control code will continue as at present.)

"Opinions and Decisions" is first condensed volume off the presses.

Two volumes on food prices will be ready for distribution September 1.

Complete series will be ready November 1, with these titles: "Consumer Goods," "Metals & Machinery," "Lumber," "Building Materials & Paper," "Chemicals & Rubber," "Food" (2 volumes), "General," and "Opinions and Decisions."

For complete details on new code, communicate with Ervin H. Pollack, Secretary, OPA, Washington 25, D. C.

► WHEAT PRODUCTION will be unlimited in U. S. next year for the first time since 1938.

Crop production quotas and marketing allotments have been wiped out by WFA order, effective next July 1. Farmers may produce kind and quantity of wheat they prefer, without acreage restrictions.

But CCC still will be operating its loan and price support programs, which will determine basic market quotations for 1945 crop.

Controls relaxed to encourage maximum wheat production next summer, in anticipation of tremendous relief demands from Europe.

Canadian wheat crop this year shows an increase of 38 per cent over 1943, as measured in acreage, assuming average yields. Canada was a full crop year ahead of U. S. in removing production controls. Entire Canadian wheat price program remains under tight government control.

Business Significance: Tremendous supplies of wheat are in prospect on North American continent both in current year and next, with all prices fixed by government loan or guarantee programs from Washington and Ottawa. North American wheat exports in crop-year beginning July, 1945, may reach 700,000,000 bushels.

► EXTRA SUGAR ALLOTMENTS have been made available by OPA for quick-freezing fresh fruits, fruit cocktails and fruit salads. Cannery and processors will be allowed one pound of sugar for each five pounds of fruit.

Prior to August 12, no sugar was allowed for these uses.

(New arrangement does not apply to householders, who must use their allot-



ment of canning sugar for quick-freeze operations.)

OPA anticipates that entire 1944 pack of canned mixed fruits will be set aside for WFA allocations, leaving only the quick freeze fruits for U. S. civilian use.

► OCCUPIED POLAND must be wrested completely from German control; is the last important source of oil, iron, zinc, lumber and chemicals open to German war supply.

Russian invasion has taken principally the agricultural areas of Poland. Allied occupation of key industrial areas of Central Poland, Galicia and Polish Silesia would deprive Nazi of 50,000,000 tons of coal a year, about 1,500,000 tons of steel, 500,000 tons of crude oil, and roughly 1,000,000 tons of grain from 1944 harvest.

Other important war materials soon to be cut off from Poland to Germany: potash, brick, cement, textiles, lumber.

U. S. Foreign Economic Administration estimates that Nazi military government has commandeered labor of perhaps 5,000,000 Poles in German war production.

SIGNIFICANCE: Watch for complete Allied occupation of all Poland.

► GREAT LAKES SHIPPING, and all inland waterways, have been exempted from WMC employment referral controls, with labor unions now authorized to supply manpower for shipping directly through hiring halls.

U. S. Employment Service will refer experienced applicants to the unions.

Regional directors of WMC may revoke these special hiring plans whenever they fail to produce adequate crews for record-breaking war tonnage.

► IMPROVED PRODUCTION OF BASIC CHEMICALS has resulted in relaxation of several controls, under M-300.

Pine tar may be purchased by small users without WPB approval up to 54 gallons monthly; also all supplies needed for ships' stores.

Previous exemption was five gallons a month.

Polyfiber, used in electrical manufacture, also has been removed from controlled list.

Two glycols also removed from allocation control—propylene and diethylene. (Both were used formerly as glycerine substitutes.)

► TRUCK AND TIRE CONSERVATION MEASURES urged by ODT accomplished an increase of 73 per cent in efficiency for bakery trucks, as measured in pound-miles.

American Bakers Association reports reduction of 23 per cent in total miles covered during 1943, as compared with 1941, but with an increase of 26 per cent in total tonnage delivered.

No other delivery-fleet industry has shown equal wartime economy, although dairy trucks are a close second.

► ADDITIONAL NURSES FOR MILITARY SERVICES are needed at rate of 2,250 a month for remainder of 1944, Public Health Service says in announcing state quotas.

All graduate nurses will be screened by American Red Cross for military pool. Only 37 States met their quotas for first half year.

Military quotas will take roughly one-third of 1944 graduates in states already experiencing nursing shortage.

► WASHINGTON BUSINESS BRIEFS: WPB has compiled a new edition of its guide of "Critical Construction Materials," codifying all wartime limitation orders in building....U. S. Railroads will get 1,800,000 tons of new rails this year, against 1,540,000 tons in '43....Despite recent relaxation of WPB orders, Plumbing and Heating Advisory Committee sees little hope for increased civilian production next winter....Special Census survey indicates 1,500,000 industrial workers 45 years and older added to U. S. pay rolls in year ended October '43—about half of them women—and 200,000 of total were over 65....Public Roads Administration finds that 53 per cent of all passenger autos are six years old, or more, with 17 per cent more than ten years in service; average life of autos (through two or three ownerships) in normal times was seven years....Revised Washington opinion following President's Honolulu war council is that Pacific clean-up may require two years after German collapse....Fourth Term supporters pooh-pooh claims of Independent Democrats that Texas' 23 electoral votes may be maneuvered away from Roosevelt....Department of Justice (Biddle) has ruled that joint action by industrial units during reconversion period will be exempt from antitrust prosecutions, provided action is pursuant to recommendations of industry's WPB or OPA Advisory Committee.





## WHAT CAN BE ACCOMPLISHED BY A *Deferred Bonus or Profit-Sharing Plan?*

Real advantages can be derived from a Deferred Bonus or Profit-Sharing Plan correctly designed to meet the specific needs of an organization. For example, such a plan —

1. Does not bind the employer to scheduled contributions.
2. Eases compensation problems.
3. Provides incentive to forward-looking employees.
4. Results in more stable, more satisfactory employee relations.

The provisions of a Deferred Bonus or Profit-Sharing Plan would cover:

**Membership**—may include all employees or only those who meet specific length of service or other permitted requirements.

**Contributions** by employer—may but need not be directly related to profits.

**Allocation** of contributions among employees—may be based proportionately on compensation and also, if desired, upon length of service.

**Distributions** of benefits to employees or designated beneficiaries—may be made upon death, disability, illness or retirement or, if the provision therefor complies with the announced requirements of wage and salary stabilization controls, upon other severance of employment.

**Investment** between time of contribution and time of distribution—may be made in securities or insurance company contracts or both.

*Our 92-page summary entitled "Pension, Bonus and Profit-Sharing Plans," covering the fundamentals of formulating and financing employee benefit plans is available. There is no obligation entailed in writing for this study, or in discussing your particular case with us.*

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NEW YORK 15

# When Lend-Lease Is Demobilized

By LAWRENCE SULLIVAN

**BY THE END of 1944, U. S. will have 35,000,-  
000,000 lend-lease dollars overseas. Squaring  
accounts will affect many lines of business**

LEND-LEASE began in a modest way on March 11, 1941. For the remainder of that first month, total lend-lease expenditures were only \$10,000,000.

But there was no limit to lend-lease demand. By the end of 1941 the monthly total had swollen to \$274,000,000. A year later the monthly figure was \$757,000,000; for December, 1943, \$1,371,000,000, and for March this year, \$1,630,000,000.

By the end of 1944 our total lend-lease outlay, in both goods and services, will aggregate roughly \$35,000,000,000—about 14 per cent of our total war expenditures.

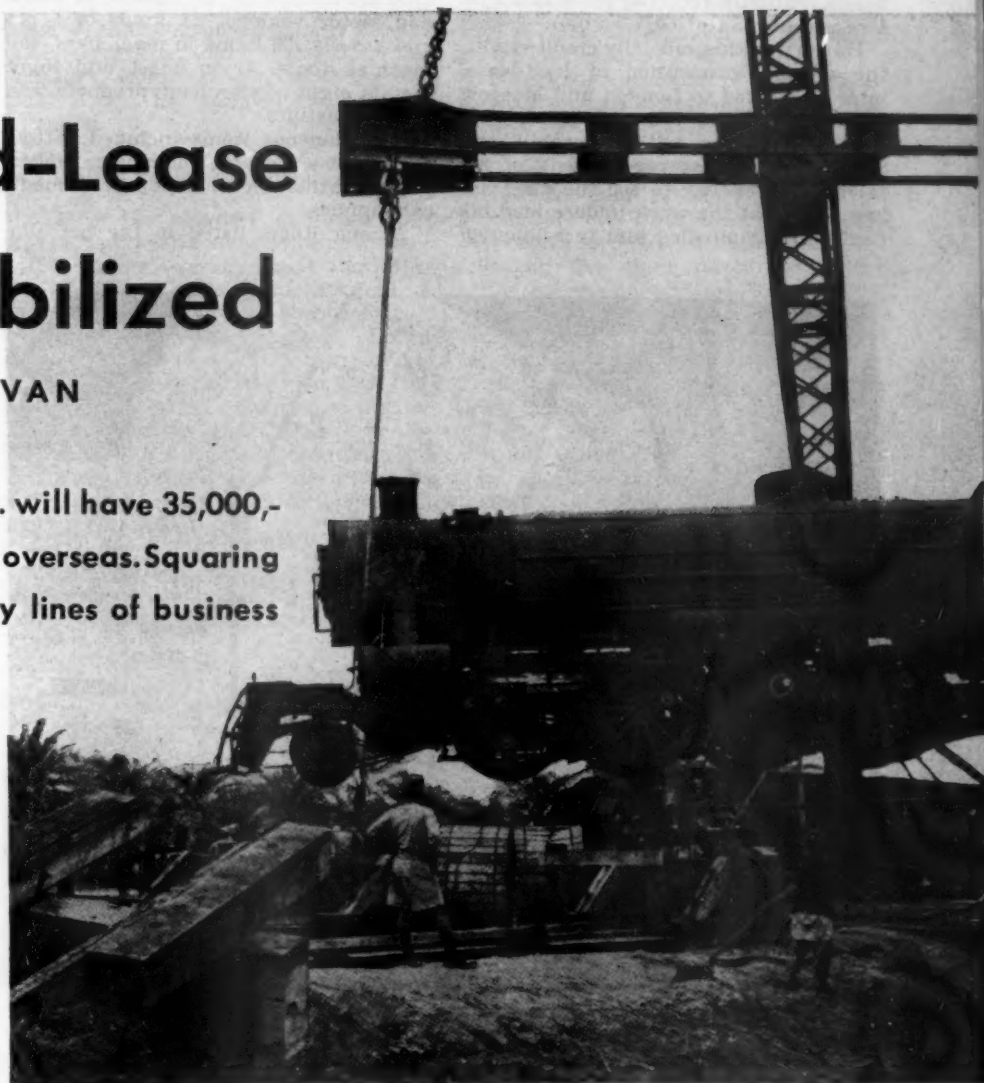
Is there any salvage for U. S. taxpayers?

Reverse lend-lease has off-set about \$5,000,000,000 of the total, leaving a theoretical "credit balance" of something like \$30,000,000,000 among 47 lend-lease countries.

The final terms of U. S. policy touching settlement on these accounts will influence business developments decisively in many lines for perhaps five years—much longer in such fields as machine tools, railroad equipment, farm machinery, radio equipment and transport airplanes.

Semi-official estimates indicate that, when the smoke of battle clears, we shall have in the neighborhood of \$10,000,000,000 in lend-lease capital goods in production around the world. Is this vast capital plant to be diverted to civilian production abroad free of all settlement charges, the product to compete in post-war world markets with U. S. capital invested in the same machines at home? What new industries thus have been established in Europe, Asia, and Africa? Are they to operate price-wise as if no capital investment were involved?

Under the terms of the 1944 extension of the Lend-Lease Act, our Foreign Economic Administration has until June



**This lend-lease locomotive is of undoubted military value now but  
at war's end its use in commerce will complicate settlements**

O. W. I. PHOTO BY NICK FARRING

30, 1948, to arrange final settlement of all accounts. Meanwhile, we must decide—and perhaps soon in regard to some items—just when lend-lease shipments shall stop. We know, for example, that some major nations already have placed orders for lend-lease auto parts which are not scheduled for delivery before the second quarter of 1945.

## Lend-lease no debt or gift

MUCH war material now under contract, and a smaller amount already landed overseas, will never reach the scene of actual warfare.

These are but sketchy outlines of the vast complex of administrative problems now under official consideration in Washington.

Matters of high policy are involved. President Roosevelt indicated in a message to Congress in March, 1943, that lend-lease settlements should be regarded as distinctly postwar problems.

"Congress in passing and extending the Lend-Lease Act," he said, "made it

plain that the United States wants no new war debts to jeopardize the coming peace. Victory and a final peace are the only coin in which we can be repaid."

That statement aroused considerable comment on Capitol Hill, resulting a few days later in a public statement from Senator O'Mahoney, that the White House view "has been disavowed by a unanimous vote of the Committee on Foreign Relations of the United States Senate."

Nevertheless, in his fifteenth report on lend-lease operations, sent to Congress on March 31, 1944, Mr. Roosevelt again outlined a possible approach to the settlement problem:

"Lend-lease and reverse lend-lease are not a system of debits and credits. They involve neither gifts, nor loans nor transfers of money. They are, instead, a system of mutual war supply that has been evolved by the United Nations to make possible the effective combined operations by which we are fighting and winning the war. The benefits which we and all of the United Nations have al-



ready mutually received from this system are beyond price."

Harry Hopkins, officially credited with the original conception of lend-lease, later journeyed to London and Moscow as Mr. Roosevelt's personal emissary to discuss the idea with Churchill and Stalin. He gave so prodigiously of his talents and energy to see the program launched that the work undermined his health and compelled him to relinquish

aircraft and parts, 22 models in tanks and motor vehicles, 24 kinds of boats and vessels; 36 items in machinery and machine tools, 31 in sheet and ingot metals, eight in petroleum products, and 32 in foodstuffs.

Miscellaneous items included cotton, tobacco, beer, drugs, chemicals, rubber, paper, leather, clothing, rope, and medical supplies.

Among items listed in the machine

lease report, enabled the United Kingdom to increase its food production by 70 per cent over prewar levels.

Farm equipment shipped included 46,000 truck-garden sprays, 5,600 cream separators, 14,000 plows, 6,000 cultivators, 15,000 tractors, 1,569 windmills, and 304 threshing machines. Apparently little, if any, of this equipment will be subject to recovery.

Rapid industrialization of Australia created an urgent demand for alarm clocks, particularly for the manning of rotating shifts in the new war plants. General MacArthur requisitioned 100,000 alarm clocks for Australia in 1944. FEA cut this to 70,500. Total military and lend-lease allocations of alarm clocks this year were 25 per cent of U. S. production, leaving approximately 8,750,000 for domestic distribution—about half the normal U. S. demand. This item was cited in the House hearings to illustrate the thin and ever-shifting line between strictly war goods and essential civilian supply items. On alarm clocks, of course, there can be no postwar recovery.

### Scrap counts in lend-lease

SCRAP metals from the battlefields of Europe and Africa already form a considerable item in lend-lease recovery. A systematic scrap campaign in every battle area is an expanding part of army routine. Up to February this year, more than 150,000 tons of scrap had been returned to seven army salvage centers in the United States. This material included 2,900 tons of scrap rubber, 3,500 tons of crashed aircraft aluminum, 2,200 tons of exploded cartridge cases, and about 70,000 tons of iron and steel recovered from tanks, artillery and landing craft.

This salvage, however, comes only from equipment of American manufacture. Similar scrap recovered from British equipment likewise is returned to the United States for salvage, but, in that case, the country which produced the original equipment is credited with the value of the salvage as a reverse lend-lease item.

In Washington, all official calculations assume that the war in the Pacific will continue at least six months, and perhaps a year, after the collapse of Germany. What is to be the status of lend-lease in this interim? Are we to continue to supply all 47 lend-lease recipients until the last shot is fired in the Pacific; or will lend-lease be pinched off for Europe when the European war ends, and continued thereafter only to the Pacific nations and dominions?

Here, again, is a practical administrative problem which awaits a decision on basic policy—a decision which only the President can make. Until the administrative agencies know what the policy is to be, they have no alternative but to carry on, full blast and all out.

A similar problem arises in relation to arms and ammunition for Europe. Experience has shown there is a lag of perhaps six to eight months between the approval of the lend-lease requisition



Food shipments under lend-lease will largely be consumed by the end of the war. Balances may be taken over for relief

all official duties. Nowhere in the public record has Mr. Hopkins stated for the possible guidance of Congress his own conception of the termination and settlement plan.

### Lend-lease shifted around

MR. HOPKINS directed lend-lease allocations for several months, then stepped aside in favor of Edward R. Stettinius, Jr., who took over the Office of Lend-Lease Administration (OLLA). When Stettinius advanced to Under Secretary of State, OLLA was transferred bodily, in September, 1943, to the reorganized Foreign Economic Administration. In these shifts of management and direction, accounting methods often were changed in many details, until Congress now is unable to draw a continuing picture of the over-all operation from its inception.

Foreign Economic Administrator Leo T. Crowley told the House Foreign Affairs Committee last March that probably 20,000 different items had been shipped under lend-lease requisitions during the first three years of operations, including 20 broad categories of ordnance and ammunition, 15 types of

tools index were textile machinery, printing presses, woodworking machinery, office machines, laboratory equipment, locomotives, railroad cars, tire-making machinery, rolling mill equipment, mining equipment, photographic machinery, farm machinery, industrial boilers and pneumatic tools.

Raw metals shipped included tin, copper, zinc, mercury, iron, steel, aluminum, nickel, brass and molybdenum.

Presumably the recipient nations used all the industrial machinery and farm equipment to expand war production abroad, to fabricate and process the raw materials shipped on lend-lease.

The capital goods still available for recovery in these durable items can be estimated only after a careful postwar inventory. Much of it has been destroyed in battle, some of it has worn out.

Farm machinery illustrates this facet of the problem. Exports of lend-lease farm machinery through June, 1944, totaled approximately \$44,000,000 with about \$25,000,000 going directly to England to expand food production and \$13,000,000 to British Colonies and Dependencies, and to Australia, New Zealand, India, and South Africa.

This equipment, says the official lend-



and the actual arrival of the goods in Europe. This is the production and shipping interval. Are new manufacturing commitments to be made right up to the day of European victory? If so, what is to be done with the eight months' supply which then will be still to come?

Obviously General Somervell, the Chief of Supply, is right in his insistence that "you can't work it out so that the last shell is fired on the last day of the war," but it still may be possible to taper off lend-lease manufacturing contracts so the supply pipe-line to Europe will not be bursting full on armistice day. Under present scheduling and production arrangements, millions of dollars of lend-lease goods will be moving out of U. S. factories for Europe and Africa four to six months after hostilities end.

Another grave problem in postwar policy is presented in the question:

Should we supply lend-lease materials to equip European armies and navies to police the peace arrangements?

England, has promised to assist the United States in the Pacific war, once

Germany goes down in Europe. Does this mean we shall continue to supply Britain under lend-lease only insofar as the additional equipment is used in the Pacific? Again, the decision must be one of policy.

### Relief follows lend-lease

MUCH of the growing lend-lease surplus on European requisitions ultimately will be taken over by the United Nations Relief and Rehabilitation Administration. Does this mean that we shall rehabilitate Europe's shattered capital plant with lend-lease goods shipped under a new set of initials—UNRRA? If so, what is to be the extent of such capital rehabilitation—and what will be the relative urgency of priorities as between U. S. requisitions for the long-starved home market and European requisitions from UNRRA?

Perhaps a proper beginning would be for Congress to review the entire lend-lease record, re-define the policy, set down clearly the expected terms of re-

covery and settlement, and fix a definite date for the termination of lend-lease production contracts for Europe.

In such a restatement of policy, there would necessarily develop a sharp line of demarcation between wartime lend-lease operations and the postwar program of UNRRA. Without such a demarcation, lend-lease may merge imperceptibly into UNRRA, and the whole program run on for a decade or more awaiting the final peace settlement through the so-called "transition period."

Out of our first \$25,000,000,000 in lend-lease allocations, about 54 per cent went for munitions, artillery, and firearms; 21 per cent for industrial materials and products, and 13 per cent for foodstuffs. These physical shipments made up 88 per cent of the total. The remaining 12 per cent was in services rendered at American ports, such as ship repairs, ferrying services, and rent on U. S. production facilities.

Save for stock piles and operational reserves, all the munitions have been

(Continued on page 86)



SIGNAL CORPS PHOTO—BLACK STAR

Russia's internal transportation system may be much improved by the increments of American equipment for military transport. Shall the surplus be returned, paid for, or sold?



# New Weapons in War on FIRE!

By C. LESTER WALKER

**NO matter how combustible the material or how hot the blaze, firemen put it out with fog, foam and snow**

up by a giant waterfall, traveled a ball of hissing fog. Projecting it on the hot decks and into the searing flames, the men made for themselves a cloud-wall of cooling mist. Sheltered behind it, they advanced through the raging inferno toward the ship's stern. Water fog, one of fire-fighting's newest discoveries, completely protected them.

Arrived at the stern cargo tanks, the men applied another modern fire-fighting miracle: foam. From special nozzles they shot a smother of snowy bubbles which stuck on everything they struck. The bubbles piled up in the tanks, floating on the burning gasoline like super-yeasty dough. Eventually they would blanket the entire surface of a tank, like a gigantic sponge cake, choking out the flames.

Here and there on the deck rivulets of gasoline made running fires. The Navy men piled up the foam in dykes and checked them.

By evening of the next day the fire was out. A \$3,500,000 ship and 70,000 barrels of war fuel had been saved. Chief credit, all admitted, would have to go to the two extraordinary extinguishing agents used: fog and foam.

The first of these—fog—is sometimes called "the new darling of fire fighters." Its performances now and then resemble the miraculous. For instance, take another recent fire: an electrical fire in a powerhouse.

A short circuit has ignited 60 gallons of oil in a big switch box. It is burning fiercely, and the fire has spread to a 250,000-volt transformer nearby. Both are sheathed in flames.

The powerhouse fire brigade rushes up  
(Continued on page 88)

**Fire-fighting techniques have been improved. But only vigilance will prevent 35,000 industrial fires a year**

**I**N A CALM sea about 50 miles off the Virginia capes, a year ago this June, two ships, running without lights, bore down on each other in the pre-dawn darkness.

One was a cargo ship carrying munitions. The other was a big tanker with 107,000 barrels of fuel on board, most of it high octane gasoline.

When the crash came, the munitions ship plunged her bow deep into the tanker's side. The tanker staggered, her forepeak nearly sliced off. With a roar, the munitions ship tore herself apart and sank. The tanker, her ruptured fuel lines geysering gasoline, burst into flames.

Almost immediately, so intense was the heat, every man aboard went over the side. The valves and wheels of the fire control system were impossible to

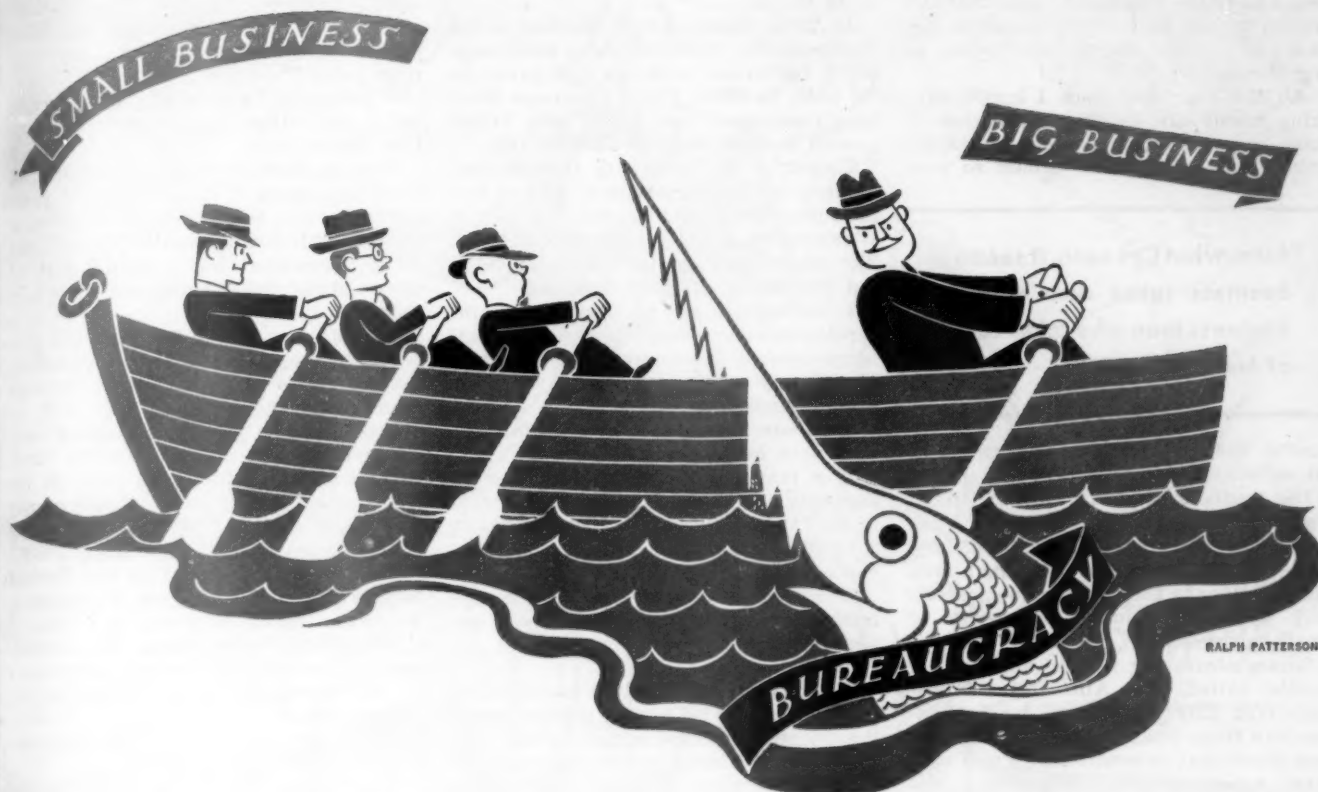
touch—too hot. Chain and cable gear started snapping, the shells for the two deck guns exploded in the heat. From the life rafts the crew watched woolly, black smoke, roaring with orange flames, swathe the tanker from end to end.

"Well, she's through," they said.

Twelve hours later, however, Navy fire fighters arrived from Norfolk on a special boat with some of the latest fire fighting tools.

The heat on the tanker was now unbelievable. Bronze fittings had melted. The fins of a spare propeller lashed to the deck had begun to droop and run. Nevertheless, the Navy fire fighters prepared to go on board.

Ahead of them, like the mist thrown



# How's My Little Man Today?

By CHARLES P. GARVIN

**"I AM TIRED of the political tinkers  
who go around saying small business  
has to be 'protected' just because it  
doesn't happen to be big"**

I HEAR a lot of talk these days about what the Government is planning to do to help small business—and the more I hear, the more my skin crawls. Incidentally, I have plenty of skin to crawl.

As general manager of the National Stationers Association, I believe I am qualified to speak for the small business man. I think I know just how he feels about this proposed government aid.

Our industry is made up of small business men. It is in close touch with all industry. The stationers make and distribute the tools of business—everything from pins to safes—everything needed to transact business and to keep track of those transactions.

Our industry started back in 1403. It has grown since then but its units have always remained small.

A friend of mine in the Stationers Association of Great Britain has made fairly famous a picture called, "The First Stationer." This picture has never been hung in the Academy but it has been framed and displayed in many a stationer's office.

It shows a figure, somewhat forlorn in faded doublet and hose, standing against a courtyard wall. To his left is

the doorway of a tavern. The man is holding a tray containing a few small articles.

The stationer got his name because he picked a good spot and remained there where people who wanted to buy his wares could find him.

The point is, however, that the stationery industry—which started small and which is made up of small firms—has come through the centuries on its own, and, like other small businesses, has been able to look after itself.

From what I've seen, it seems to me that business takes care of the business man who takes care of his business.

When a business is really small, it doesn't remain that way. It either grows—or dries up. If it dries up, that's a sign that it wasn't needed in the first place, or that the person trying to run it wasn't equipped to do so.

For the life of me, I am not able to get a clear idea of why there is such

a political flurry to "protect small business."

A business may be small in the eyes of Washington but big in its own community. Take, for instance, an enterprise in, say, Pecan Gap, Texas. Some of our modern economicusses in Washington would have you believe that, just because this concern does not do a big volume, it must necessarily be hanging on by its eyebrows.

If you were to investigate, however, you would find that this company is firmly established—and that it is doing more in the way of service and rate of capital turnover than many a huge outfit which happens to be in one of the great industrial centers and is known as "big business."

In other words, the business in Pecan Gap is really a big business in a small town. The proprietor (and he and his kind make up the bulk of American business) neither needs government help nor wants it.

Speaking for the typical small business man, I resent public utterances by people who would like to treat us as charity patients in a government-owned economic hospital.

I am tired of political tinkers who



go around pointing out that small business has to be "protected," and that the reason it has to be "protected" is because of a giant bogey man known as Big Business.

All the big businesses I know anything about are either a collection of small enterprises, or else are individual enterprises which have grown so suc-

**"From what I've seen, it seems business takes care of the business man who takes care of his business"**

cessful they couldn't remain small so far as volume is concerned.

Big business doesn't go around picking on small business. In fact, big business is the best customer small business has—and big business, in turn, knows that its place in the sun is made possible only by the continued prosperity of small business.

Some interesting figures appear in a booklet called, "The Automotive Industry's War Effort is Shared by Subcontractors from Coast to Coast." The figures show that subcontractors and vendors (America's average business concerns) get 56 cents out of every dollar the prime contractor receives. (In peacetime, it totals 60 cents.)

The figures show also: that 63 per cent of the subcontractors employ fewer than 500 workers each; that the sub-

contractors are located in 1,325 cities in 44 states.

In 1941, International Harvester did business with 10,000 concerns which supply it with raw materials and parts; in '42 with 11,000 A.B.C.'s (average business concerns); and in '43 with 14,000—with orders totaling \$255,000,000.

Twenty-five thousand independent dealers sell International Harvester products. This firm is not located in Washington, is not tax-supported—and, like other large companies, is anything but the enemy of small business.

I could go on and on showing the inter-dependence of small business and large-volume business. The figures would only prove over again what we already know:

*The man who knows how to do business does business.*

If a man does *not* know how to do business, not all the Bureauking's horses and all the Bureauking's men can make a profit for him, and keep him a going concern.

The political concern for the average business reminds me of a personal experience I had when I was about six years old.

One day my mother told us kids that we were going to have company from the Coast. The Coast seemed pretty far away to me. I imagined it must be right close to the moon because I had heard of the Golden Gate.

The great day came, the guest arrived and was seated on the horsehair sofa in our parlor. At the proper time I was led in. I had lovely curls (you wouldn't believe it to look at me now) and wore

shining shoes and a beautiful velvet Lord Fauntleroy suit.

The lady reached over, put her hand on my head and said, "How's my little man today?"

Whereupon I answered, "I'm all right but I don't like these damn curls and this damn suit."

That is about the way the small business man feels. The government planners want him to grow curls and to wear an economic Lord Fauntleroy suit, and some bureaucrat wants to pat him on the head and ask: "How's my little man today?"

The Murray Small Business bill proposes to appropriate \$1,000,000,000 of federal funds to do the small business man good. The business man will, of course, have to pay the overhead—and the overhead is likely to devote itself to making it as tough as possible for the business man to make enough money to pay the overhead. An "all-wet" nurse for business—not practical but political!

I notice in the report of the Special Senate Committee to Study Problems of American Small Business this line:

"Preventing exploitation of distributors by manufacturers or manufacturers by distributors to the detriment of free competition."

What a chance for the adolescent lawyers with government jobs!

The Senate Committee report says:

"Unless adequate protection is afforded small business during the period of reconversion, its chances for survival as a permanent part of the economy will be seriously handicapped."

I am wondering who is going to plan that "adequate protection," who is going to decide which companies get first chance to manufacture and distribute civilian goods.

**"When a business is really small, it either grows—or dries up. If it dries up, that's a sign it wasn't needed, or that the person trying to run it wasn't equipped to do so"**

Inasmuch as the vast majority of American business concerns are not known as big business, I smell danger here to America's business and industrial machine which has proved itself the greatest of all time.

On the subject of surplus war property, the report says:

"It is true, of course, that when the billions of dollars of surplus property is released into the American market, no area or segment of the economy will escape its impact, but there is also awareness that only the smaller businesses are in danger of being crushed by the mass of surplus."

I suppose the man who doesn't carry  
(Continued on page 44)



**The government planners want the small business man to grow curls and to wear an economic Lord Fauntleroy suit**



Careful timing can minimize the effects of government sales in the markets

# Taking War Surplus in Stride

By A. D. H. KAPLAN

WITH \$200,000,000,000 already spent by the Government for war procurement, it is not difficult to conjure up a specter of huge quantities of postwar surplus goods being dumped on the American market.

Public channels of information give us little to go on as to the rate at which military supplies are consumed and the amount that may remain when the hos-

Dr. A. D. H. Kaplan is a widely-known economist, now on leave from the University of Denver. His assignments have included the World Monetary Conference in London in 1933; lectures on international economic problems before the Institute of World Affairs, Mondsee, Austria, and Toynbee Hall, London; consultant fellow at Brookings Institution, Washington, to which he plans to return as a member of its resident staff next year; and adviser to Mitten Management in Philadelphia.

During his 23 years at the University of Denver, he directed social studies, and in 1938 became director of the Alfred P. Sloan Foundation experiment in graduate work on government fiscal management, particularly at state and local levels. From 1936-38 Dr. Kaplan served in Washington as director of the Urban Study of Family Income and Expenditures, under the Bureau of Labor Statistics and cooperating agencies.

He is now serving as consultant to the House of Representatives' Special Committee on Postwar Economic Policy and Planning.

**THOUGH** billions of dollars have been spent for war procurement, the surpluses which might have a depressing effect on commerce are likely to be small

tilities end. Yet it may be said at the outset that a study of such information as is available tends to clear away much of the pessimism about the size of the commercial surplus. There is even good reason to believe that some parts of the war surplus may prove to be a boon by making available sorely needed goods, thus checking the tendency to serious price inflation and black market.

One has only to remember the two years following World War I to realize that the threat of postwar inflation is real. Although prices had gone up steadily from the beginning of 1914 to November, 1918, the further increase in prices from the time of the Armistice to the spring of 1920 was around 30 per cent.

The demand for goods which had been curtailed during the war outstripped the ability of the manufacturers to build up supply. Distributors competing for merchandise often ordered several times what they expected to get. The mounting orders accentuated the sky-rocketing of prices. When manufacturers finally made headway toward meeting this overstimulated demand, the inevitable reaction took place. Dealers cancelled their excess orders as frantically as they had placed them before. Buyer resistance came to the surface by May, 1920.

The ensuing crash in prices to the low of June, 1921, a drop of 45 per cent, is now sobering history.

It is equally a matter of history that

(Continued on page 60)



# INFLATION—



As inflation gets started, production cannot keep up with the growing demand

The rush of consumers to convert money into goods adds to inflation's fire



A lucky farmer might get enough for his wheat to pay his debts in one year



Industrial concerns may profit temporarily from inflation—if they have cash to keep going

**I**N 1924, after the wild postwar inflation in Germany, two brothers of differing temperaments discussed the effect of the inflation on themselves. One was thrifty and had bought war bonds to the maximum of his ability. The other was always thirsty, and when the inflation was over he had his cellar full of empty bottles which he sold in exchange for the new currency.

The thrifty brother had nothing but worthless bonds to show for his thrift. The drinker had several hundred marks to show for his improvident habits.

Whatever moral one may draw from this case, at least all would agree that a currency so shifting in value that it plays this type of trick on people is highly demoralizing.

Shifting currency values play so many tricks on people that they themselves become tricky, ruthless and lose all respect for established property and human rights. A sound currency is indispensable for a stable society. "Orthodox" monetary experts are frequently chided for their orthodoxy, but a little knowledge of economic history shows the extreme dangers of unstable currency.

During wars and in early postwar periods, governments need purchasing power desperately. They get from 30 to 50 per cent of their money needs through taxation. The rest they get through borrowing. Some funds they borrow from individuals, corporations and savings institutions. Such borrowing is not inflationary. The balance they get by borrowing from commercial banks or by printing paper money. Both of these are inflationary.

The more the Government relies on commercial banks or the printing press, the greater is the danger of extreme and wild inflation. In fact, extreme inflation (loss of confidence in the worth of a currency) is generally possible *only* when governments lose the courage and the will to tax their citizens adequately. In other words, if we want our currency to retain substantially its prewar value, and if we want our Government to spend great quantities of money for war or other purposes, we must decide in favor of heavy taxation.

If deficit financing is "discovered" as an easy method for financing government needs and is persisted in for long periods and to a high degree, this is almost certain to end in currency disaster. This explains why many persons view with great alarm the continuous budget deficits which we have now had for more than a decade.

Our failure to attain real prosperity before, and our price controls during, the war have both subdued the tendency toward inflation. Nevertheless, we are sitting on a "powder keg" which may or may not explode, depending on the good sense and courage we are willing to display. If we decide that our mounting debt, growing out of our budget deficits, cannot destroy the value of our currency (just because it has not done so to date) and that all the warnings are old wives' tales, then we are in danger. If we recognize that financing the war or the postwar heavily by continuous deficits financed through commercial banks or by paper money may in time lead to runaway inflation, then we will be able to stop it.

Unfortunately, there are some pleasant aspects of inflation which people in a position to profit temporarily enjoy. While the free "ride" of inflation is in process, people lose their sense of values to a degree utterly unbelievable by those without firsthand knowledge of what inflation does to judgment. There are cases on record where highly intelligent and edu-



# Who Gets Hurt and How

By DR. EMERSON P. SCHMIDT

**SOME individuals might be helped temporarily by inflation. But in the long run it would hit in so many places that no one could escape its damage**

cated professional people have during times of inflation sold a \$1,500 piano for five dollars without realizing what they were doing.

It is just as though you bought gasoline by the gallon without knowing that the size of the gallon was shrinking constantly. If you paid \$10,000 for a farm and someone offers you \$30,000 during inflation, you are likely to think of the 200 per cent "profit." So you sell. Only when you have your money in the bank do you begin to realize that it is losing purchasing power week by week. Then you rush to convert your \$30,000 back into commodities.

In one such case in Germany, a man disposed of all his assets at a great "profit." Soon he was rushing into the street to convert his money into something tangible again. The first thing he saw was a riding saddle, and he bought it. He had no use for the saddle, but it was better than currency rapidly shrinking to a zero value.

Rapidly rising prices cause a stampede of buying and selling, values shift daily and, except for a few shrewd individuals, everyone loses his sense of economic values.

The reader may say, "Interesting, but that was in Germany; it won't happen here. We are too smart. Why bring that up?"

True, it won't happen here if we understand the dangers and if we have the will and the courage to prevent it. The best assurance against its happening is a full realization of its dangers, especially of the apparently innocent, slow steps by which it happens. Furthermore, the subject is brought up because it is happening *today* in China and elsewhere—it will happen in many European countries after the war if our 1918 postwar experience is repeated.

The new governments in Europe will be under great pressure to spend money but they will not be strong enough to tax the necessary money away from the people. They will resort to deficit financing or printing press money as was the case in much of continental Europe after 1918. Destructive inflations took place in Russia, Germany, Austria, Hungary, Poland, Bulgaria and Rumania. In France and Italy, the postwar currencies had only about one-fifth their prewar value. The revolutionary character of postwar civilizations in



**Endowed hospitals stand to lose much income and principal**



**Insurance policies, retirement benefits will drop**



**Readily marketable commodities may have runaway prices**



**Taxes, rising slowly but surely, pinch as other rising prices do**

European countries is intimately tied up with the destruction of currency values.

Nor is the United States completely free from this danger for two reasons:

1. For 15 years we have been unable or unwilling to balance our budget and, since nothing too serious has happened as yet, we are in some danger of developing a feeling that, since all the warnings of inflation have missed the boat, they will continue to prove wrong.
2. Due to this unbalanced budget, we have increased our money in circulation by several hundred per cent.

### Inflation could start easily

IN 1929 we produced a gross national income of \$83,000,000,000 (an all-time high prior to the present war) with under \$5,000,000,000 in currency. That was \$40 *per capita*. Today we have \$22,000,000,000 in currency in circulation, \$160 *per capita*. Our demand deposits (the equivalent of money) totaled \$22,500,000,000 in 1929; today they total \$65,000,000,000.

Potentially, we already have the makings of an inflationary boom. Should people anticipate that this increase in currency and deposits indicates a gradual rise in prices, they might start to convert money into goods without regard to their need for the goods. Such a stampede itself creates large money incomes because the pace of business, reinforced by the going-to-work of this money already in existence, easily leads to monthly, weekly, even daily, price mark-ups.

Only if we have the courage to balance the budget, or better still to overbalance the budget under such a situation, can we hope to head off a period of runaway prices once the pressure is built up.

When we have visible evidence that prices are rising, we rush to buy, and our business men do some of next year's business this year. When the housewife finds that sugar, coffee and dress goods are priced just a little higher each time she buys, then, to save money, she soon buys just a little more than she really needs. If enough buyers act this way, they are helping to create inflation. If production could keep pace with these rising demands, inflation would not occur but, sooner or later, when people lose confidence in currency, production cannot keep up.

Because of the initial stimulus which a little inflation gives to business and to employment, many people have a mild desire to see inflation come about. If enough people have this desire, that in itself may bring inflation. But what will happen when the pantry is full or the money runs out and everyone stops buying!

While the process of inflation is on, many people will benefit temporarily. Jobs are easy to get. Wages rise. Interest rates rise. Raw materials also rise in price because the supply cannot be expanded rapidly enough. The producers of minerals, lumber, chemicals and farm products may all benefit for a time.

Prices rise on a wide front but not equally. Some rise a few per cent, some rise substantially; others rise rapidly to extreme heights.

The "free" ride is widely enjoyed. Having one's service or product appraised more and more highly in dollars gives one a sense of getting somewhere. Yes, inflation can be enjoyable while it lasts and providing *your* services or product is leading the march!

If all prices, costs and incomes moved in parallel during an inflation, little harm would result, but price movements are always unequal. In a free, capitalist society my income is someone else's costs; my selling prices are the costs of others. When prices and costs move unequally, distortions, maladjustments and suffering are inevitable.

A farmer may borrow \$1,000 when wheat sells for \$1 a bushel. The next year he may sell his wheat at \$2. Thus a debt worth 1,000 bushels when it was incurred is liquidated with the proceeds from 500 bushels. The farmer makes a "profit" based, not on productivity or efficiency, but on a capricious price level. Debtors always profit by inflation if they have enough cheap money left over to pay their debts.

Funds borrowed when prices were low or normal are repaid when prices are high. The debtor pays in return less in man hours or in goods than he borrowed; the creditor receives less real goods and services than he lent. If the price rise is extreme, the creditor may be wiped out.

The creditor class may lose in power, prestige and influence. A new group, the debtor group, comes to the front. Inflation may seem good for them, and some easy money policies may be welcomed and put into practice. Unless this tendency is checked, social chaos may prevail and stable government as well as stable currency and business are difficult to attain.

Among those suffering seriously during inflation are persons with fixed or substantially fixed incomes. Prices charged by public utilities, including railroads, are fixed by government. Rate increases take time and are always resisted, partly because consumers oppose increases and partly because the government never knows how long prices will continue upward and is, therefore, inclined to postpone increases.

Business concerns operating under well established prices, such as five cents for a bar of soap or a package of gum or a cigar, are likely to get squeezed. Their working capital exhausted, they are poor credit risks and may be forced to the wall. The things we buy which have customary prices, or rounded prices such as a dime or a quarter, are numerous. Announced price lists, advertised prices and customary prices all work against these producers in their effort to get more money for their product. It is not as easy to change such prices as is commonly assumed. The lag may be fatal.

On the other hand, businesses with large overhead costs—businesses in which bond interest, depreciation charges or fixed rental or royalty charges constitute a large percentage of total costs—may profit fabulously for a time, providing, of course, that they can raise the price of their product or service. A mining company whose product takes a free price rise and whose costs are largely fixed may enjoy the experience so long as this lag between its costs and its selling prices continues.

### Endowed institutions would be hurt

HOSPITALS, educational and other institutions as well as all manner of trust funds are usually caught in two ways:

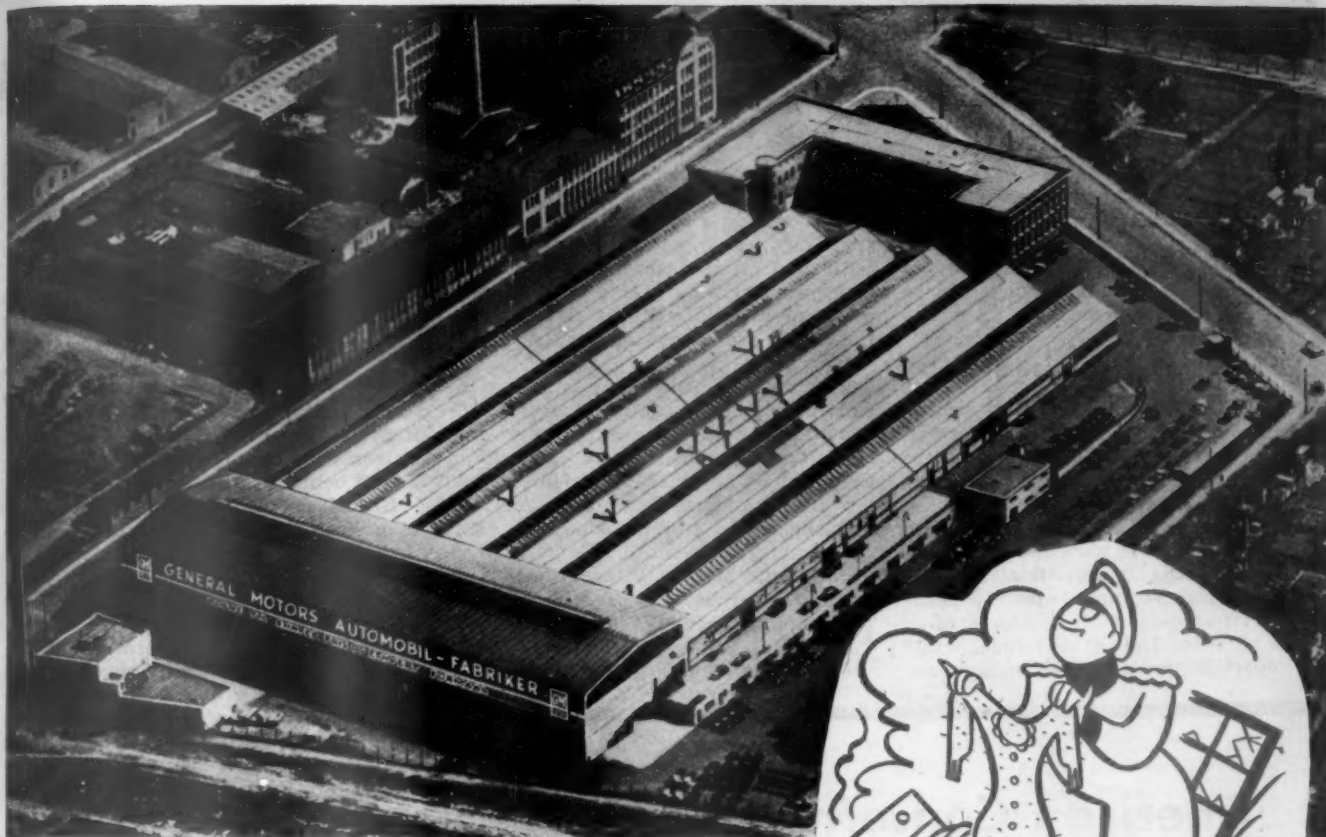
In the first place, debtors who have sold bonds to this group may find it possible to pay off the bonds with the cheap money. These institutions then lose not only their endowment but also their interest income. In the second place their operating costs—wages, materials and supplies—rise greatly. So their money income may be cut relative to their mounting operating expenses. The value of insurance policies, of bonds or savings accounts may be cut by 25, 50 or 90 per cent or even more. Our 60,000,000 holders of social security cards would witness a vast shrinkage in the buying power of annuity benefit payments.

Governments and their employees suffer during inflation. Tax rates are frequently fixed for a biennium and new or rising rates are always resisted. Yet governments, because of the numerous institutions and projects which they carry on, are heavy buyers of materials and supplies. Little wonder that government employees nearly always see the great dangers of inflation to themselves and fight against it. The same is true of schoolteachers. In fact, the white-collar class—stenographers, clerks, bookkeepers and professional people—nearly always find their incomes lagging greatly when prices rise.

The working class (except to the degree to which they are debtors) suffers under inflation. Wages tend to rise but not as rapidly as prices. The worker generally must cut out of his budget first some of the luxuries, then the conveniences. Finally inflation may reduce his expenditures even on what he regards as necessities. He may move to cheaper quarters, sell his car or let it go back to the finance company and, in numerous other ways, engage in a slow process of retrenchment. All this is painful and humiliating. Bitterness develops and trickery may be used to hold as much of the standard of living as possible.

If the worker had a sufficient surplus to pay off his debts  
(Continued on page 52)





EWING GALLOWAY

Our possessions in Axis hands, a check-up shows, include everything from industrial plants to an artificial leg



# American Property in Slavery

By JUNIUS B. WOOD

THIS WAR will end with the United States the first country in the world in ownership of property in foreign countries. England used to be the outstanding nation in investments outside its own frontiers. In the years between the two wars, the United States forged ahead until today its corporations, estates and individuals own property in every coun-

try—a material stake in world affairs.

The American investment abroad matches the industry, trade and varied activities of the United States. It includes factories, transportation systems, mines, pipelines, plantations, chemical plants, banks, churches, theaters, harbors. Distributing companies for American products increase the total.

Among the thousands of individual investors are owners of patents, trademarks, contracts, securities and an occasional distinctively personal cherished possession.

In round figures, these holdings approach \$14,000,000,000. The preliminary total of a census by the Foreign Funds Control division of the Treasury Department, before all the reports are in, is \$13,350,000,000. Of this, approximately \$4,000,000,000 is in enemy and enemy-occupied countries. Incidentally, only \$450,000,000 of the \$13,000,000,000 of foreign wealth in the United States is known to be held by enemy nationals.

In addition to private investments in foreign countries, our government prob-

ably has spent another \$4,000,000,000 on construction abroad by the Army and Navy during the war. Accountants now are unscrambling the maze of figures and the exact amount of the billions may not be known for months. Most of this will be washed out when it has served its military purpose but many millions in improvements and facilities will remain as a permanent contribution to the welfare and commerce of peace.

## Investments all over the world

THE United States has a vast investment in the postwar world. Reports show that Americans own property in 112 different lands. The future of these investments, how they will continue to benefit American business and national economy, will be more important than their immediate physical condition at the peace conferences.

With this long-range perspective, the Treasury Department is now summarizing the information collected by the census. Other nations have listed their hold-





ings abroad, know their position here and elsewhere. Our Department of Commerce has made similar reports in the past but this is the first time the United States has carried it out on such a comprehensive scale.

America's share in the postwar world made the census imperative. It will be necessary for our discussions at the peace tables, particularly in studying the damages and claims for property in enemy and occupied countries.

### Property abroad is listed

FINALLY, the United States—whose citizens outnumber all others as foreign investors—must know what and where these investments are in order to formulate its future economic policy.

The number of American investments is amazing. Reports were received from more than 175,000 individuals, 32,000 estates and trusts and 16,000 corporations. Hundreds put their assets on a single sheet of the printed form while the report of one corporation makes a

stapled pile of forms, two feet high. In value, holdings of individuals range from \$2 to nearly \$10,000,000. One corporation's foreign holdings reach \$500,000,000. In only four countries do total American investments exceed that.

Names of the same American companies reappear in country after country. They are pinpoints on a world chart with the United States as the producing, processing and marketing center. These companies are introducing to other people things which are necessities in our way of life.

The land is rare which has no American sewing machines, cash registers or office appliances. Largest investors and operators abroad include: Aluminum Company of America, American Radiator and Standard Sanitary, American Smelting and Refining, Anaconda Copper Mining, Ford Motor, General Electric, General Motors, International Harvester, International Telephone and Telegraph, Socony-Vacuum, Standard Oil of N. J., Standard Oil of California and the Texas Company.

Though the bulk of property listed represents securities and the somber assets of industry, some items are unusual. An American religious order, for instance, reports a cathedral and works of art in Italy valued at \$50,000,000. Another religious order owns a cathedral in France.

An occasional smile is scattered through the sea of papers, though individuals who miss loved possessions are pathetically serious. One woman lists six suits of woolen underwear. A man reports an island in the Pacific as his property. Another owns a bed in which Mme. du Barry slept. Kitchen furnishings turn up in numerous reports. One citizen wants to recover an artificial leg he left behind while fleeing from Europe.

Securities also include rarities. One man has 400,000,000,000 rubles whose production was limited only by the speed of some departed Russian general's printing press. As these were repudiated before 1938, they are not reportable. Others have stacks of German inflation marks, a trillion of which may be worth 42 cents. Closer to home is a New Yorker's inventory of defaulted bonds of a nearby state, claimed as owned abroad because he bought them while on a trip to Europe.

### A census for record only

THE Treasury Department emphasizes that this is "a census of American owned property in foreign countries" and is not "a registry of claims." The Department does not pass on legality, validity or valuation. It merely makes the record. Claims for recovery of property or for restitution for what has been lost or destroyed must be presented to the State Department.

The immediate value of the census was demonstrated when our troops occupied Rome. Information which had been supplied helped locate \$30,000,000 worth of American property and the key men who could be put in charge again.

What has been buried, literally put underground, is surprising—everything from jewels and gold to heavy machinery. Rare stamps are popular. Stamp collections, carefully wrapped against moisture, are war's most numerous victory gardens.

Property abroad may be bonds, trust funds, bank deposits, accounts receivable, patent royalties, foreign currency or securities, insurance, real estate, buildings, machinery, stocks of merchandise. Every person holding foreign property valued at more than \$10,000; or dollar bonds, patent or trade-mark agreements, franchises and concessions is required to report. If the amount is less than \$10,000, except as specified, reporting is not compulsory but, if reported, will be recorded. Steamships and rolling stock of railroads are not reported.

Business, commercial and financial concerns and thousands of individuals have cooperated in making the reports. Each has borne the expense in propor-

## American Concerns

In the present enemy and occupied countries, American concerns engaged in manufacturing, distribution, petroleum and miscellaneous, numbered:

	Mfg.	Dist.	Pet.	Misc.	Tot.
Belgium & Luxemburg	24	29	11	18	*85
Czechoslovakia	6	5	—	9	20
Denmark	8	20	7	15	50
Finland	—	7	—	13	20
Baltic States	—	—	—	11	11
France	78	56	7	32	*176
Germany and Austria	82	32	10	20	144
Greece	—	8	—	10	18
Hungary	4	4	—	8	16
Italy	26	16	4	15	61
Netherlands	17	22	9	16	*67
Norway	9	10	—	14	33
Poland	4	9	—	7	20
Rumania and Bulgaria	6	10	—	12	28
Yugoslavia	—	8	—	7	15
Japan	18	17	—	17	52
British Malaya	—	11	—	19	30
China	27	32	—	21	*85
India and Burma	5	23	6	15	49
Netherlands East Indies	3	8	—	10	*31
Philippines	15	36	—	19	*90
Totals	332	363	54	308	1,101

\*Belgium, France and Netherlands, each three public utilities and transportation; China, five public utilities; Netherlands East Indies, ten agriculture; Philippines, nine public utilities and 11 agriculture.

## TO EMPLOYERS

These suggestions for overcoming fatigue should benefit your employees and aid in increasing their efficiency.

On request, Metropolitan will gladly send you enlarged copies for posting on plant or office bulletin boards.

## Have you ever faced his problem?

• When this fellow gets tired, his problem is simple: he just goes to sleep. But do you know what to do about "that tired feeling"?

SUPPOSE, for a minute, you think of your supply of bodily energy as a sort of savings account...



You *make deposits* in the form of food which bodily processes convert into useful energy—aided by sleep, rest, sunshine, water, and fresh air.

You *withdraw* energy from your account every time you so much as lift a finger, every time you breathe.

So long as you *balance* your energy account every 24 hours, you feel well and work efficiently. But if, day after day, you spend more energy than you replace, fatigue *accumulates*. You get "that tired feeling."

This is nature's warning to do four things...

**1. See your doctor.** Chronic illnesses, such as tuberculosis or heart disease, can cause fatigue. So can poor eyesight or hearing, foot disorders, faulty posture, bad eating habits. Since bad teeth may be a cause—see your dentist, too.

**2. Accumulate more energy.** Eat adequate meals at *regular* intervals, including a good breakfast. Try to get to bed an hour earlier. Seek *extra* sunshine and fresh air.

**3. Withdraw less energy.** Try to change habits and living conditions which waste energy. Plan ahead—"What your head does, your feet won't have to." Worry, tension, fear, and anger squander energy—control your emotions! *Learn to relax!*...

**4. Practice relaxing** by deliberately letting stiff, tense muscles go limp, one by one. Use every odd moment to acquire this restful habit.



There's absorbing interest in your job if you look for it, and interest combats tension. After work take up a hobby—sports, music, Victory Gardening, reading, walking, just plain loafing—whatever revives you most quickly.

Today, it is a patriotic duty to make every ounce of energy count. You will find helpful suggestions about overcoming fatigue in Metropolitan's free booklet, "Fatigue—What to Do About 'That Tired Feeling.'"

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## Metropolitan Life Insurance Company

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Leroy A. Lincoln,  
PRESIDENT

1 MADISON AVE., NEW YORK 10, N. Y.





tion to the size of his report, a considerable cost in many cases.

In general, property is reported according to its condition and value on May 31, 1943. If the fortunes of war destroyed it between January 1, 1938, and that date, it can be reported as if undamaged.

American citizens abroad shall report, certain exceptions being made for those in the armed forces or in enemy countries. Also, non-citizens who lived in the United States for three months before May 31, 1943, can report their assets abroad, the same as American citizens. Refugees can report property which was seized, destroyed or lost after they arrived in the United States. Property lost before their arrival is reported on a special appendix and not included as an American investment abroad.

Claims for loss of life or personal injuries are not an asset. For real property, the actual cost is taken with allowances for capital expenditures and withdrawals but not for maintenance and repairs. Insurance policies are taken at their surrender value. Securities are considered at their cost or face value and, in general, at their market value as of May 31, 1943. Values in foreign currencies are converted into dollars at specified exchange rates.

American investments in Germany are larger than in any country except Canada. Bonds of the Dawes-Young plans are a factor. On the basis of preliminary tabulations, the United Kingdom is a close third but this will be reduced as a more detailed distribution is made of the holdings of American concerns in Canada and England with subsidiaries in other countries.

According to the preliminary tabula-

tions, holdings in enemy and occupied countries, include:

#### Enemy Countries

Austria	\$ 180,000,000
Bulgaria	10,000,000
Germany	1,290,000,000
Hungary	55,000,000
Italy	265,000,000
Rumania	65,000,000
Japan	90,000,000
Total	\$1,955,000,000

#### Occupied Countries

Baltic States	\$ 20,000,000
Belgium	110,000,000
Czechoslovakia	160,000,000
Denmark	50,000,000
Finland	35,000,000
France	370,000,000
Greece	140,000,000
Netherlands	215,000,000
Norway	40,000,000
Poland	255,000,000
Yugoslavia	30,000,000
British Malaya	35,000,000
China & Manchuria	165,000,000
Hong Kong	15,000,000
India & Burma	55,000,000
Dutch E. Indies	75,000,000
Philippines	170,000,000
Total	\$1,940,000,000

Americans have assets even in Soviet Russia where all tangible property is state owned. It appears likely that at least part of these assets would be reported by enterprises such as Amtorg, the Soviet distributing and purchasing organization in the United States, which as an American corporation would be required under the census to list its properties abroad.

The Treasury has not classified the reports according to character of investment. It is evident that corporations, the smallest group of investors, have by

far the largest investment. Estates and trusts are next. Individuals, the largest group, account for the smallest dollar total.

The best idea of how American direct investments abroad are divided is given by a Department of Commerce survey of 1940. (See box on page 32.) Although its total is only a little more than half that of the Treasury census, the figures are typical.

#### Future waits on victory

FINAL decisions on the future of these enterprises will not be made until victory. Meanwhile American industry is planning for the future. One man who represents an American corporation with tremendous overseas activities declares:

"Industry will go forward faster than ever before. Production will be intensified. In every part of the world, consumers need goods, factories need equipment and, in war-devastated countries, facilities must be restored so the people can be put back to work and production restored. These broad general demands must be met.

"American factories and distribution plants will continue abroad. They will adjust themselves to changed conditions. Depending on the country, there is a possibility that, in the future, ownership of these factories will not be entirely American but shared with nationals of the country.

"Contrary to prevalent impression, an American factory in a foreign country does not take business from the United States. It increases American trade and is needed for foreign and international trade. In no country are the workers and the machinery as efficient as in the United States. Much of the foreign factory's machinery, tools and high-grade parts must come from here.

"An American factory in a foreign country is a cog in all lines of industry, trade and employment which make the United States great. By avoiding tariffs, shipping costs and other expenses, it can sell cheaper. This means that more people are able to buy, which in turn means more production, more workers, more wages and more money to be spent for other things, many of which come from America.

"The factory in a foreign country is part of a slowly rising tide. It provides work not only for its own employees but for industries from which it buys supplies and for the thousands who produce raw materials. What it must obtain from the United States serves the same purpose in this country. As the living standards and prosperity of those countries rise, our own markets will increase.

"American factories at home have a backlog of orders to meet. Their so-called branch factories in foreign countries will increase the demand. Each American factory abroad is a unit in a certain industry but, in the broad overall picture, each one is another step forward in America's expanding trade."



"And another thing! Dammit all, Rittmeyer!  
Quit looking so cool and collected!"

*"Welcome, Friend!"*



## Two Home-y Words Telling Why It's Chicago's BASIC Advertising Medium

"Welcome, friend!"... Multiply this simple phrase more than a million fold and you get the measure of feeling which so strongly supports The Chicago Daily News... An evening newspaper, a family newspaper with more than a million reader-friends who at the end of every week-day say "Welcome, friend!"... Chicago's key audience for advertisers—and how well business executives throughout the land know it!... For 43 consecutive years they have placed in The Daily News more Total Display lineage than in any other Chicago newspaper, morning, evening or Sunday\*... Productive response, at maximum economy, has convinced them that they are right!

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**DR. THOMAS PARRAN, Surgeon General of the Public Health Service, started his career because he knew which end of a cow gets up first**

**CAREERS** have an odd way of starting from almost any little thing. Take the case of Dr. Thomas Parran. He was familiar with one trifling fact. No doubt with other trifling facts, also. This particular fact does not seem to be of importance to any thinking person.

Because Tom Parran knew about it he started on a career that ultimately made him Surgeon General of the Public Health Service.

That is the greatest guardian of public health in the world today. Those are Dr. Parran's words and he should know. It covers a wider field. It is staffed with specialists in every branch of medical knowledge. So far as is humanly possible it keeps out of this country the almost innumerable assailants to our national vigor. Its specialists travel half way around the world to meet these enemies. They make informal agreements with other countries.

The war has added to the number of threats to our health. Our airplanes now fly regularly to lands in which epidemic disease is accepted as a part of the routine. The guardians seal the planes airtight before they start for home. They are fumigated. Then the guardians go

When Hitler began his career of murder in Europe and refugees were swarming on every outbound ship thousands of rats were outriders. It was impossible to apply the usual precautions. But, when the refugees reached these shores, they were bathed and disinfected and the rats were killed. Every ship that sailed the seas had rats in its holds until recently. Most of them still have. But the Public Health Service now rat-proofs the newly built American ships. The rat-proofing cuts down the costs of construction.

Typhoid fever used to be a commonplace in our rural communities. It still is in too many of them. But not in the communities which have been protected by the Public Health Service. This is where Thomas Parran came in.

He is today 52 years old, slender, gray-haired, brown-eyed, cordial but not effusive. His voice is low but on occasion there is a snap in it. He will talk freely about public health, but he will not volunteer that he had a horse to ride when he was a boy on the farm near St. Leonard in southern Maryland, where Parrans have raised tobacco since the first one came over from England

# Guardian at the Gates of Health

By HERBERT COREY

over every inch with magnifying glasses to discover what kind of mosquito or fly or bug has been killed, or if they are killed, and what precautions are to be taken. The crews of the planes are practically sealed in netting and gloves and boots when they touch at some ports. Their diet is watched for fear they may bring some enterprising intestinal bug back with them.

Reports come to the Public Health Service that typhus has appeared in some little mud harbor that cannot be located on the ordinary large scale map. Action is taken. Yellow fever is heard from. Almost invariably—perhaps in every instance nowadays—the country of origin is glad to cooperate.

in 1650. The Parrans have always been of consequence in their community. A Thomas Parran was a surgeon in the Revolutionary War and a member of the First Medical and Chirurgical Faculty of Maryland. Chief Justice John Marshall is a collateral ancestor of the present Thomas Parran. Often there was a doctor in the Parran family. That is almost a tradition.

He was prepared for college by private tutors. When he was 19 he was given the A.B. degree by St. John's College, Annapolis, and four years later graduated with honors from the College of Medicine of Georgetown University. His bent was toward research. Today he says that a "good bench worker" was lost when he went into the Public Health Service. He had test tubes and Bunsen burners in mind when he applied for a temporary position in the Service in 1916. Sooner or later, he thought, he might get into the laboratory.

## Work toward sanitation

BUT he fell into the hands of Dr. L. L. Lumsden, now retired and living in New Orleans, but then the chief of the rural sanitation work for the P. H. S. Lumsden may not have been the first in the Service to urge sanitation on those who carry their water from the well and give no thought to indoor plumbing, but he was easily the first enthusiast. He spent his time in the more backward places. When he went fishing he first tried to catch fish and second to locate the community pesthole. When the dapper young Parran presented himself Lumsden did not inquire about his diplomas. He popped a strange question: "Which end of a cow gets up first?"

It might seem that, as the late Harry Leon Wilson used to write, "nothing could be of less consequence." But Parran was able to reply successfully to the query about the end of a cow. And of a horse. He could tell Lumsden how a hen walks and how a robin walks. Lumsden gave him the temporary appointment. He explained that he had been trying to find a man who knew enough about life on a farm to be able to meet farm folk easily:

"And with sense enough to observe,"

said Lumsden. "It probably makes no difference to anyone but the cow which end uplifts first, but a boy who had lived on a farm and had never noticed these things wouldn't be any good to me. Nor"—he may have added with conviction—"to any one else."

A year later Tom Parran was commissioned an Assistant Surgeon in the Service's Regular Commissioned Corps. He had demonstrated his ability to get along with people, the reason probably being that he likes people. Professional uplifters sometimes complain bitterly about county officers in slouch hats and knee boots who spit at cracks and ignore "furriners" who complain about flies and filthy water. Parran did not go into communities carrying a Book of Revelations under his elbow. He got acquainted, told the people what he wanted to do and how it could be done. Occasionally he was obliged to find a leader to take over the work. The leader might be a sheriff or the keeper of the general store, but the people listened to him. Parran demonstrated that he knew which end of the cow gets up first.

### Cleaned up local areas

FOR 20 years he was undoubtedly in touch with more state health problems than any other man in the country. This may be an overstatement, but it is not likely. In his first three years as a commissioned officer he directed the cleaning up of affected areas in five southern states, the combatting of a serious typhoid epidemic in Texas, was made chief medical officer of the Muscle Shoals Sanitary District and, as executive officer, helped to reorganize the medical service of the War Risk Insurance Bureau. By June, 1921, he had been in charge of the Tri-state Sanitary district of Kansas, Missouri and Oklahoma in the lead and zinc mining areas and had been appointed State Director of rural sanitation in Missouri, where he was able to revise the communicable disease regulations, and create a division of sanitary engineering.

He initiated the first trachoma investigation—which led to extensive control measures—and directed a study of malaria in Southeastern Missouri. In 1924 and 1926 he studied health conditions in Illinois, North Carolina and Tennessee and helped prepare their codes.

At intervals colleges and universities have given him honorary degrees and he has taken part in inter-American and international conferences and clean-ups. He has been given decorations.

In 1926 when he had been in the P.H.S. for ten years, he was detailed as Assistant Surgeon General at Washington, in charge of the Division of Venereal Diseases, the youngest man ever made a division head. People had been afraid to use the words syphilis and gonorrhea. A kind of volunteer censorship was in operation. Years earlier a play had been produced in which the horrors of syphilis were told, but only the more daring saw it or talked about it.

Parran came right out in meeting



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Sound, economical protection is assured by Hardware Mutuals policy back of the policy—a way of doing business that makes your interests our first consideration. It means nation-wide service by experienced, full-time representatives. Its basis is good management—and a careful selection of risks that has returned substantial dividend savings to policyholders. It means

prompt and sympathetic settlement of claims without trouble or red tape.

In other types of insurance also, dividends can represent important savings. For example, if your home fire insurance is not in line with today's increased property values, you may be able to increase your coverage at no extra cost—because Hardware Mutuals dividend savings to home owners, as well as to automobile owners, have always been substantial.

Take advantage of the savings and service you'll gain through the policy back of the policy. Let the Hardware Mutuals representative help you plan the full insurance protection you need.

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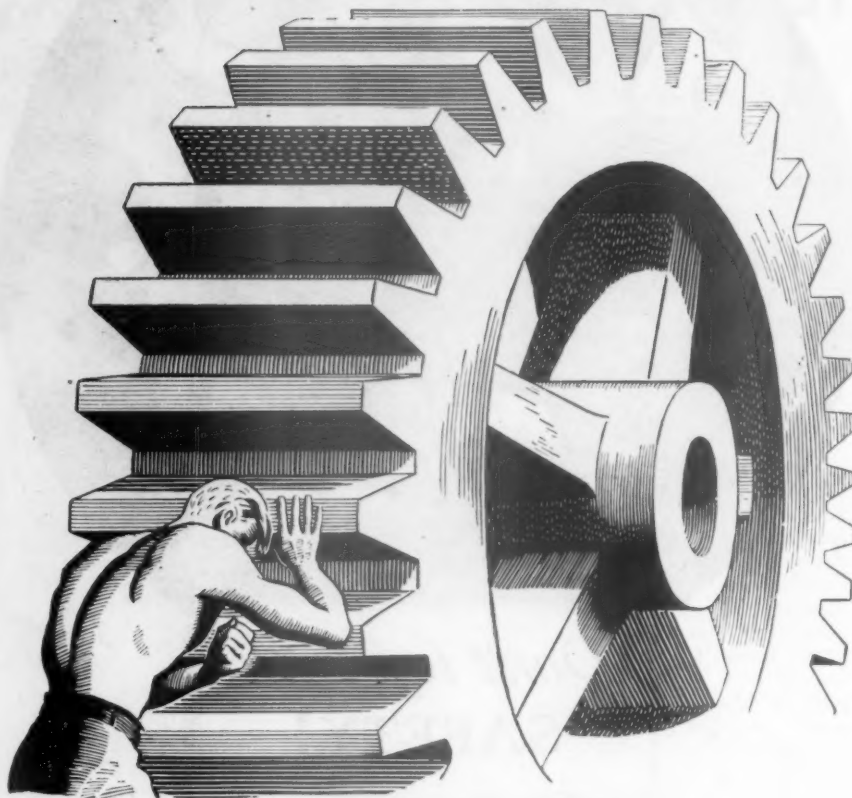
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# THE SINEWS OF WAR ... THE OPPORTUNITIES OF PEACE



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Tens of thousands of her sons and daughters in the Armed Forces;  
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Busy factories running 24 hours a day—textiles, munitions, aviation, shipyards, plywood, pulpwood and other forestry products;

Hundreds of mica mines...feldspar...kaolin...lithium...tungsten;

Fertile fields from which come cotton, one of the principal sinews of war, precious fat-yielding peanuts and soya beans, and a host of other *victory producing* products;

Mighty harnessed rivers from which flow hydro-electric power to turn the wheels of Industry not only of North Carolina but also of neighboring states.

All these vast resources, when War's end comes, will be returned to the production of civilian goods. New technologies developed during war will be utilized to make amazing new items for the World of Tomorrow. Those planning for this new era will do well to turn their eyes toward North Carolina, the State of Industrial Opportunity.

Plentiful raw materials, equitable year-round climate, *stable* labor, excellent transportation facilities and a geographic location placing North Carolina factories overnight from the largest consuming markets are basic factors that make for profitable operation.

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Raleigh, North Carolina.

## NORTH CAROLINA

and told all. He fairly jammed a known edge of the facts down the popular throat. Today not even the most prudent publications evade them. By 1930 he had become nationally—but slightly—known. Even today his reluctance to dramatize himself has the result that his name is known but he is not.

In 1930 Franklin D. Roosevelt asked that he be assigned as State Commissioner of Health in New York. In that year he became secretary and member of the State Health Commission, and helped to draw up recommendations which the legislature later made into law. In 1931 he was reappointed Commissioner and in 1935 headed a mission to study the venereal control programs of Norway, Sweden, Denmark and Great Britain. On his return he reported enthusiastically on the success of these control measures and gave new power to the national campaign against these diseases.

In 1936 he was appointed Surgeon General of the P.H.S. He was reappointed in 1940 and 1944. In 1943 he was one of the United States delegates to the United Nations Conference on Food and Agriculture at Hot Springs and later was a delegate to the first conference of the UNRRA. He is a member of perhaps a score of scientific and medical societies.

Up to this line this has perhaps been a dull recital of work and honors. It has been necessary for background.

### We need better health

THE fact is—as told to a Senate subcommittee—our national health is shockingly poor. One witness said that American youth is “soft and flabby.” The reports from Tarawa and Normandy and Italy do not bear this out. Others said that more than 4,000,000 young men who might have been soldiers were rejected as physically unfit. Ninety-five per cent of us need dental care; 30 per cent need it badly. About 2,400,000 persons were injured last year in industrial accidents. Farm regions are so lacking in health facilities that rural farm rejections are proportionally higher than in the cities.

We have boasted about what we eat and how we live and our schools and hospitals and homes and health.

If the witnesses before the Senate subcommittee are right it simply ain't so.

If there is one individual in this country whose business it is to correct these conditions it is Surgeon General Thomas Parran of the Public Health Service.

He does not deny any of the allegations. He reiterates and emphasizes some of them. We have not enough doctors to meet the demand in normal times. Too many of us know a lot about Betty Grable's legs and not enough about the local cesspool. We know a great deal about a great many medical problems, but as a people we are careless. Only 38 states have industrial hygiene organizations and of these only 10 have staffs of more than four professional workers. The P.H.S. has been able

INVEST IN INVASION—  
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## Forcing Europe's Fortress

More than men and machines are meeting the ultimate test on Europe's battlefields. Allied strength, determination and wisdom are on trial. Bitter action is now testing the adequacy of months of patient planning:

Planning that produced planes, ships, shells, tanks, guns and other weapons of war . . . Planning that trained and equipped millions of men in all branches of the service . . . Planning that gathered men, munitions, supplies and food from all over the nation and transported them to the scenes of action . . . Planning that maintains communication lines for supply and reinforcement of troops . . . Planning strategy—time and points of attack, necessary troops, equipment, reserves, supplies, hospital facilities and personnel.

Planning on such a staggering scale involved countless hours of toil, mountains of paper work and literally billions of figures.

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**NORDEN BOMBSIGHTS**—Years of experience in precision manufacturing are enabling Burroughs to render an extremely important service to the nation by producing and delivering the famous Norden bombsight—one of the most precise instruments used in modern warfare.

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**FIGURING AND ACCOUNTING MACHINES** are also being produced by Burroughs for the Army, Navy, U. S. Government, Lend-Lease and those business enterprises whose requirements are approved by the War Production Board.

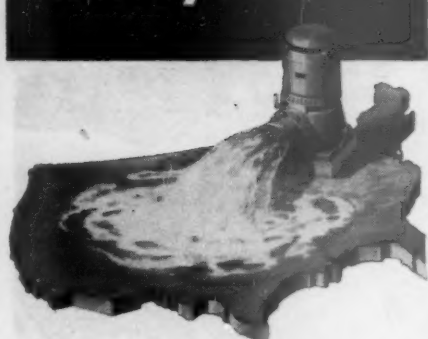


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**300  
gallons of water  
for every person in America**

The combined daily productive capacity of the thousands of Peerless Deep Well Pumps is in excess of 36,000,000,000 gallons. This, figuratively speaking, is enough water to supply every person in America with 300 gallons per day. The colossal production of water, pumped by Peerless, is distributed among countless fields—for city water services, on farms and ranches for irrigation and livestock, and in factories and plants for critical war uses,—wherever a dependable water supply is needed. Engineers and experienced pump users made exhaustive study before selecting these thousands of Peerless Pumps. Their judgment is your protection.

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TURBINE PUMPS HYDRO-FOIL  
HI-LIFT PUMPS HYDRO-JET

in the past year to supply many war-boom or undeveloped communities with at least a nucleus of health organizations:

"Many of them have had to start from scratch, providing services which more advanced communities have long provided as a matter of course. They have had to deal with the basic problems of sanitation in milk, water supplies, restaurants, sewage and so forth—"

There is murder in every one of those problems. But at the last report there were only 545 professional workers assigned to 220 areas. The P.H.S. in cooperation with the medical profession and the health authorities hopes to use mobile units to teach some of the fundamentals of food. The routine X-ray examinations being conducted by the P.H.S., the Army and Navy, and other organizations of men and women inducted into war service show that one in every 100 persons examined has some form of pulmonary tuberculosis.

"Few of them have been followed up and given the care which would restore them to health. State and local health departments have been quick to realize their own lack of facilities for this work and have called on the P.H.S. for assistance which we have been unable to give."

Dr. Parran has asked Congress for the means necessary to give this help.

**Postwar health program**

THE war and the end of the war steps up the danger to the public health. He would have a \$2,000,000,000 federally-financed, integrated state-hospital system, stemming up from local clinics in distant regions through district health centers or hospitals to base hospitals in convenient localities. All witnesses agree that some coordinated action should be taken. The man in the backwoods has a moral right to health protection. As much as the man in a Park Avenue penthouse. The Alaskan highway would have been built even if the sole available medication had been brown pills and the carpenters had been held responsible for the splinting of fractured bones. But it was the more easily done because a P.H.S. surgeon was sent along. The job killed him.

Dr. Parran is not greatly concerned by the fears that federal, state and community cooperation in health work might be an inlet to socialized medicine. His position is simple. It is the doctor's duty to serve the sick. He thinks a practical plan should be worked out for this service. All of us have more or less health. We should be interested in preserving what we have. It was on that theory that the P.H.S. was created.

He is not particularly interested in the debate about the T.V.A. It may be a socialistic enterprise as many people say. He is delighted, however, to report that a P.H.S. officer in charge of the antisickness operations in that area worked out a plan which practically put an end to silicosis in the building of the great Fontana dam. It

is one of the great dams of the world and the men who got out the rock from which cement was ground suffered from silicosis just as other men on the same job everywhere in the world have always suffered.

Incidentally Dr. Frank M. Cherico saved the Fontana dam-builders \$150,000 on their cement bill.

The Cherico matter illustrates the Parran system. He has decentralized the Service as much as possible. He finds a good man, locates a place for him, and gives him responsibility and freedom.

"Now and then we put a round peg in a square hole, of course. Then we shift the peg."

**P.H.S. has new functions**

WHEN the P.H.S. was organized, Congress gave it three functions. It was directed to expand the boundaries of medical knowledge, to cooperate with states and other public agencies to prevent disease, and to take charge of marine hospitals. Nowadays it cooperates with the Army and Navy medical services, runs the Coast Guard and Maritime hospitals, looks after the health of tourists, rangers and Indians in the western parks and reservations, examines the physical condition of immigrants, works with the Bureau of Prisons' medical services, is on call for the Lend-lease, UNRRA, Caribbean Commission, Inter-American Affairs, Foreign Economic Administration, and a dozen or more other agencies.

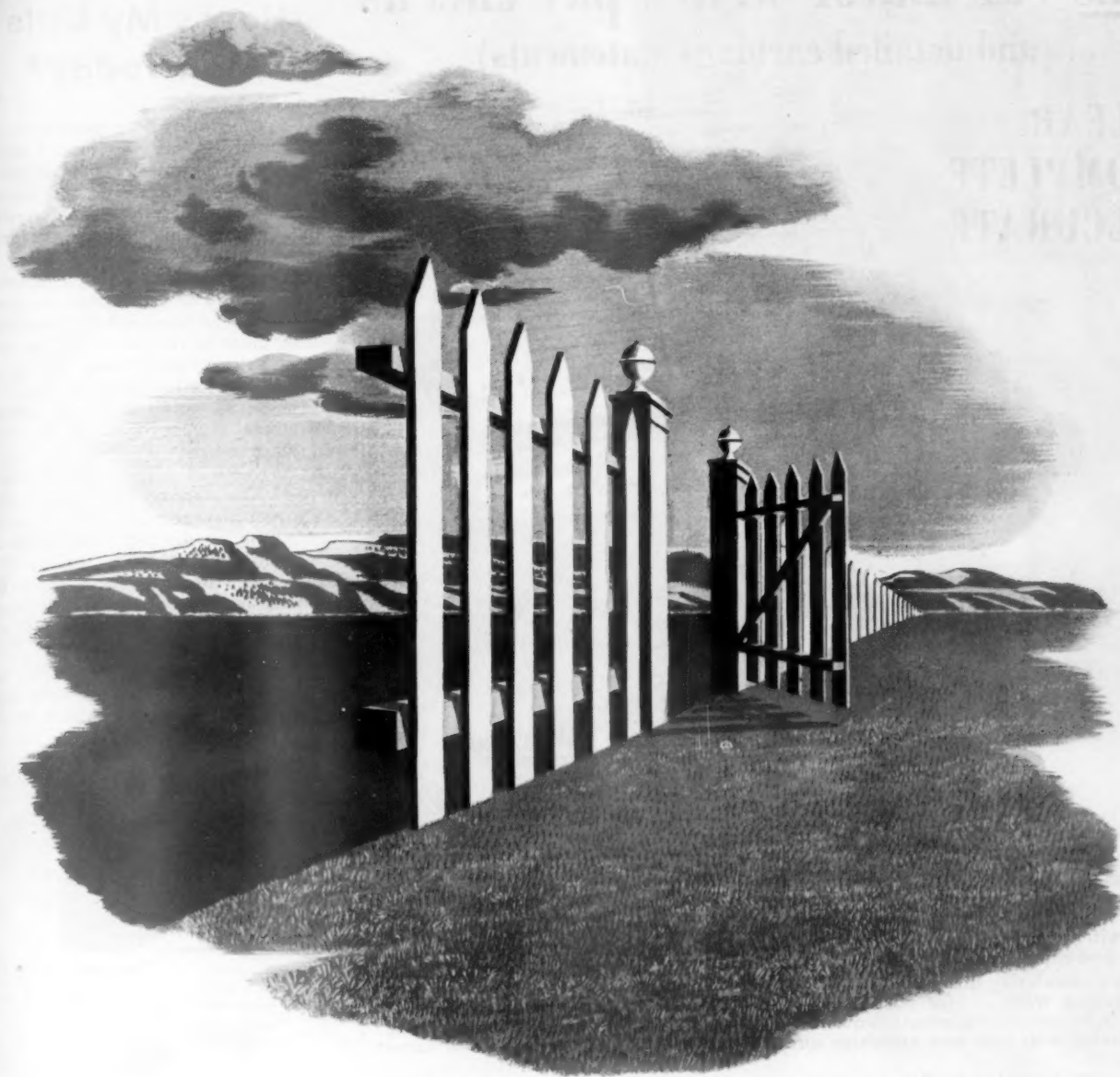
And—while American health is not as good as it should be and could be—we need not worry too much.

There have been no epidemics as yet. "There will not be."

Some diseases are more or less constantly with us, of which infantile paralysis is perhaps the most moving. Malaria carriers are constantly coming in from the infected areas abroad. When the Army is demobilized more will come. But the P.H.S. knows the malaria-carrying mosquito and how to handle him and how to clean up the places where he lives and breeds. The new drugs, some of which the P.H.S. developed, and all of which are being used and experimented with, are doing marvels.

The devilish rat carries the germs of plague. But the rat can be controlled if the people will only interest themselves. The P.H.S. has worked out a plan for the rat-proofing of houses at a cost of \$15. Other countries are being provided with drugs and assistance as a kind of distant guardianship, but on a practical basis. They are given what they need and not what they might like to have. Our experts are on the watch in such far away spots as Australia and Egypt. Our health teams ride planes and camels and jeeps. The great experimental laboratories—that in which cancer is being studied is an example—are broadening the field of knowledge.

It isn't such a hard job, as Dr. Parran sees it. The main thing is to know how to get along with the folks.



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**NATURALLY!** Because the Southland is rich in fertile soil and sunny skies and warm rainfall.

Most of the South has a growing season of six months or longer. It also has nearly two-thirds of all the nation's land with annual rainfall of 40 inches or more!

There's "greener grass," too, for industry and commerce in the South... unlimited natural resources... steady, intelligent labor... every favorable condition for growth and prosperity.

And just as the Southern Railway System measures up to its great transportation assignment in the war, so will it be ready to meet the expanding post-war needs of the South—where the grass IS greener.

We believe it's time *now*... to "Look Ahead—Look South!"

*Ernest E. Harris*  
President

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Along with the added flexibility provided by its wide carriage, the Printing Calculator is more than ever the ideal all-purpose calculating machine. It's a great manpower conserver, especially in today's scarce-of-help office, for it speeds the flow of vital figures. Its simple, one-hand keyboard banishes confusion. Its printing feature safeguards the work — abolishes hidden errors — eliminates the need for re-run to prove accuracy... And its ability to multiply, divide, add, subtract — and *print* — lets this one machine do the job of two!

We urge all businessmen to investigate this time-saving office "machine-tool." For details, just phone our nearest office or write us at Buffalo 5, New York.

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*by* **Remington Rand**

The only PRINTING calculator with automatic division

## How's My Little Man Today?

(Continued from page 26)

any inventory, or who hasn't been in business but is able to come in and get hold of surplus property and dump it, would be considered a "small business man" because his volume before he started was nil.

The report talks about governmental tax policies. The restriction on growth and success in business by taxation, of course, must be removed. But the report doesn't say anything about that.

The report talks about:

"Access to small business loans on reasonable terms for working capital and other needs."

At present, if a man has something to show, he can borrow money. If he has a record that indicates his right to borrow money, he can borrow money.

Is it necessary, I wonder, for Uncle Sam — under the guise of "helping" small business — to compete with the banking business which itself is largely small business?

The economic planners talk about modern and vigorous enforcement of antimonopoly legislation. Shades of gray



**Above all, let's keep politics  
out of business and industry**

and black and blue are likely to appear when you get into that sort of thing. Does "monopoly" mean that, if a man happens to succeed — if he happens to make a better mousetrap that brings the world to his door — he has established a monopoly?

Is government to place a ceiling on success? Does a business man have to be a failure to get into the economic heaven?



## 100,000 MEN FOR TWENTY YEARS!

That's what it took, according to the most reliable estimates, to erect the Great Pyramid of Cheops. Twenty years of human sweat and toil, of wracking labor under the lash of the Pharaoh tyrant. Here was work that broke the backs of men . . . and crushed their souls as well.

Tremendous as this task was, you'll find many places in America today, where loads, comparable in the aggregate, can be handled in a single day—by but a few men.

Yes, the story of materials handling is one of human progress—of lifting loads from the backs of men, freeing them to seek new horizons. Applied to industry, it is the story of modernizing production and of lowering manufacturing costs.

For over 60 years, P&H Electric Hoists and Cranes have been serving American Industry. In thousands upon thousands of plants their ever-widening applications are enabling skilled workmen to accomplish more, in less time at lower cost.

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Overhead Cranes • Electric Hoists  
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EXCAVATORS • ELECTRIC CRANES • ARC WELDERS
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HOISTS • WELDING ELECTRODES • MOTORS





**here are  
enough men wearing  
Paris garters,  
suspenders and belts  
to elect the next  
president... easily!**



# PARIS

**GARTERS**  
No metal can touch you

**FREE-SWING  
SUSPENDERS**  
Can't skid off your shoulders

**BELTS**  
Tops for your trousers

A. Stein & Company, Chicago, New York

Then, too, who is going to decide what "small business" is? Is the measurement going to be based on small volume, small management, or what? I see that someone in the Government defines the small business man as the one who has "no Washington representation."

The economic planners bring the casualty soldier into the picture and talk about setting him up in business.

The casualty soldier is no different from any other type of business man or any other type of American. If he has the stuff it takes to run a business, and if that is what he desires to do, he will have no difficulty getting into business.

But I don't think it is reasonable or

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**"Finance doesn't make a business. You can have all the finance you want and still go busted—and the more finance, the bigger the bust"**

---

fair to all business men (many of them now in the Army), or to the casualty soldier himself, to set up new competition financed with government money without the individual having to prove he is capable of operating a business.

Now, don't get the idea from this bit of common sense that business men lack sympathy for, or understanding of, the casualty soldier. Such is not the case.

I can guarantee that experienced business men will be glad to help any casualty soldier, who has business ability and who wants to get started in business. My own association, incidentally, has been working for more than a year on a definite plan to fit casualty soldiers into business and into better jobs than they had before the war.

It is not fair, however, to let a man get into business on the taxpayers' money. Unless he has what it takes to stay in, finance won't keep him in. Finance doesn't make a business. You can have all the finance you want and still go busted—and the more finance you have, the bigger the bust.

You have to have something besides finance in business. You've got to know goods and markets. You've got to know public desire and change. You've got to know how to handle people—and a thousand and one other things. A man, to succeed in business, must know how to run a business. He has to be able to use his time to advantage.

Many persons just don't have these things and certainly no bureaucrat can provide them.

A business, to show a profit, has to click; and unless the click is pleasing to the potential customer, it isn't much good. To be a going concern in a community, a business has to be an asset to that community.

Will Rogers once said that everyone was ignorant, but fortunately on different subjects. It seems to me there is no

use putting to disadvantage a fellow who happens not to be familiar with the ways of business—especially after he has gone through the war and has been hurt. There is no use having him hurt again by putting him in a spot where he cannot possibly succeed.

If he is going to be trained for business, that is another story. But the best place for him to get his training is not from people who work for the Government, but from people who know business and its problems.

When folks on the public pay roll undertake to supply the technique and the information that business needs, they have to get that information from business and from business men.

Why not start at the beginning with the job coming from business—the job delegated to business—and with no bureaucratic control of business creeping in?

If the job has to be done, either in whole or in part, why not keep the inexperienced and theoretical out of it by turning it over to already existing business organizations—trade associations, local boards of trade, local chambers of commerce, organized service clubs?

These organizations are made up of successful business and professional men. When they put out a service for business men, they know that it has to meet the test of practicality. They know the support of their work ceases the moment they fail to produce results. A government-financed bureau, on the other hand, can go on and on—and the taxpayers' money along with it.

If I were to make a few suggestions that I think most small business men would concur in, they would be something like this:

1. Let's have less government control and direction of business. Let's stop the government inquisitions that go on in small business firms the country over. Let Congress insist that its laws in reference to wages, hours and other things be administered in the way that Congress wants them administered.

2. Small business and big business are against thousands of "county agents" being set up all over the country to tell business men how to operate. If these subbureaucrats knew how to run a business, they would be working for business and not for the Government.

3. Make the antitrust laws more realistic. Make the antimonopoly laws more realistic. Let's set up a situation where the small business man doesn't have to spend all his time defending himself from the Government.

4. If the Government wants to help business, let it turn the job over to business men who are still in business and know what it is all about.

Let's keep America a place where a man can make his work worth while to himself.

Let's realize that our great cities are



## To take the measure *of a coming job*

**F**EW people notice or even think of the many special abilities the railroads have been required to develop. One of these is accurately anticipating the need of agriculture and other industry for rail transportation.

Because they do this, freight cars for years have almost always appeared at the right place, at the right time and in the right number. This has been a *must* for orderly marketing and efficient low-cost transportation.

Today, while everything they have is working day and night to hasten victory, the railroads are busy also taking the measure of the jobs that lie ahead.

What new kinds of goods will have to be carried? What kinds of cars will they need? Where will they come from and where will they go? What service and rates will be needed to develop business, shipping and employment?

Long before the call comes for postwar action, the answers to these and hundreds of other questions must be ready. Finding the answers to these questions is the work of a separate group of seasoned railroaders—the Railroad Committee for the Study of Transportation.

In this way, the railroads are looking ahead to the time when America turns again to peacetime work—and planning their necessary part in helping to make it a wonderful land to live in, just as they have helped make it strong in time of war.



### **AMERICAN RAILROADS**

**ALL UNITED FOR VICTORY**



# We'd Still Put Our Money On THE HARE...



**E**VEN though the hare lost its famous race with the tortoise, we think we'd back the long-eared animal in any rematch. And production speed is going to be a vital factor in the postwar world. Indeed, our hope of postwar prosperity is based largely on low-cost production . . . to keep consumption high and *provide jobs for everyone.*

Here at Acme our consulting engineers can help with your production problems—current or postwar. We also design and build special tools; produce dies, patterns, gages, fixtures. And no better heat-treated aluminum castings are made than those which carry the Acme name.

*Your inquiry will receive prompt attention.*



## ACME

*Pattern and Tool Company, Inc.*  
DAYTON, OHIO

HEAT-TREATED ALUMINUM CASTINGS... PATTERNS... TOOLS  
TOOL DESIGNING... PRODUCTION PROCESSING

American monuments to the genius and inspiration of men who found in America their chance to express themselves.

Let's recognize that in this country we have an amazing people—that here people believe in so living that they get out of it all they may get in comfort and happiness.

Let's keep this country a place where a man can build for himself—for here is a country where a man inherits no title and the finest one he can create is that of good citizen.

Let's keep the wondrous things that have been done by the Americans of the past before the Americans of the future.

Let's keep ever before us the fact that here we have a living level far higher than that of any other nation on earth.

Above all, let's keep politics out of business and industry.

Let's resist any attempt to divide American business—and business, small or big, will take care of itself as it always has. We can't multiply business by dividing it.



CELANESE CELLULOID CORP.

## Two-ply Belts

Leather power transmission belts with a minimum of the stretch that requires shut down for take-ups is made by a process using a plastic core between two plies of leather. This plastic core is run through a solvent bath and is then fed continuously between the single plies of leather which together pass between sets of rubber pressure rolls and are wound up on a drying drum while under normal belt drive operating tension. The result is belting with uniformly high adhesive strength.

*For Constant Reference*

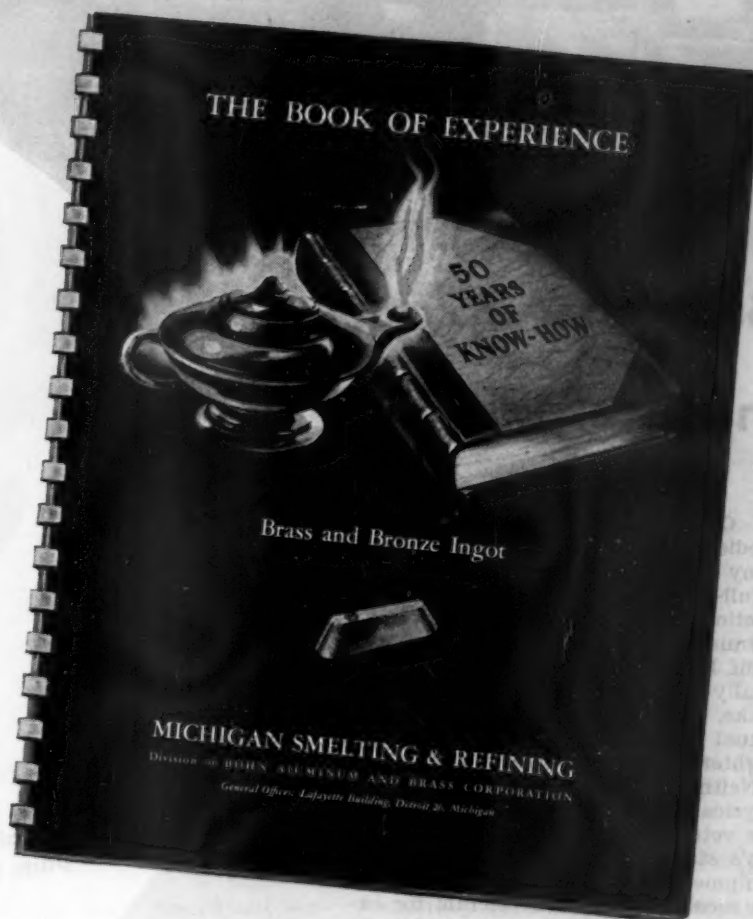
# "The Book of Experience"

This new Michigan Smelting booklet is in fact a history of the entire development of the use of brass and bronze ingot in industry. It covers the steps from ingot metal in its crudest form to the present day, when scrap metal is refined to very definite specifications.

The manner in which Michigan Smelting ingot is made is described in detail. We show why you can always bank on getting accurate analysis ingot when you use this company as your source of supply.

Listed for constant reference are specifications of the various alloys in daily use.

If you have not as yet received one of these interesting and useful booklets, write us. We will see that you receive one immediately.



## MICHIGAN SMELTING & REFINING

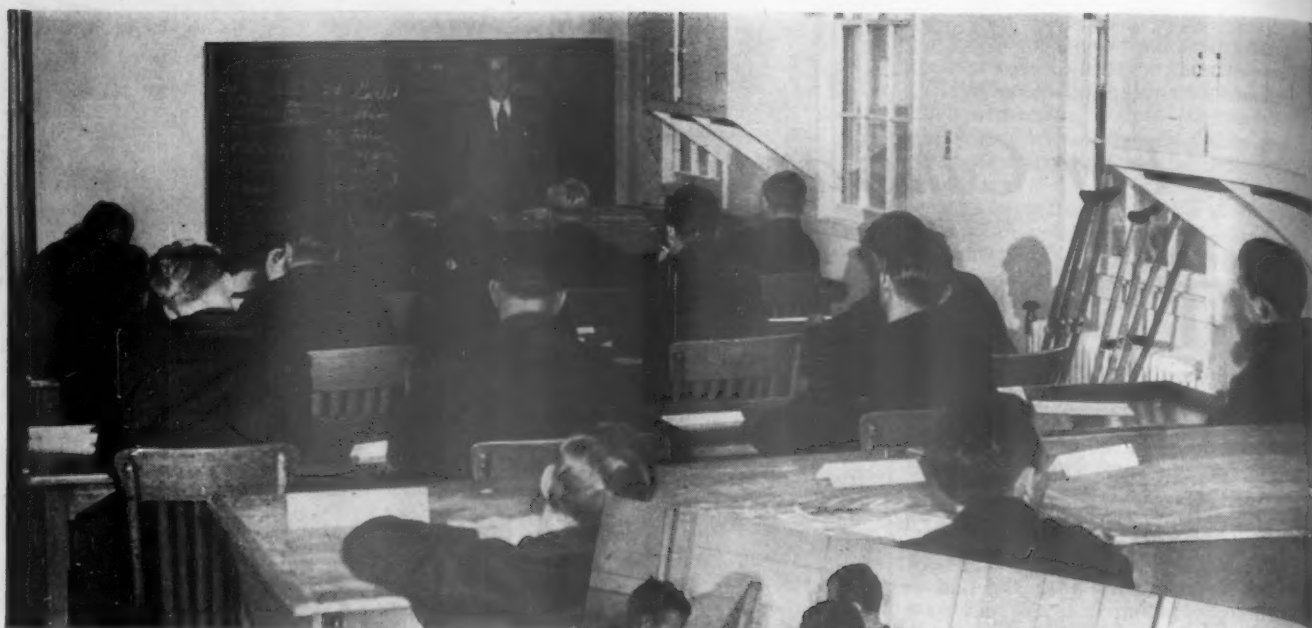


BUY  
WAR  
BONDS

**Division of BOHN ALUMINUM AND BRASS CORPORATION, DETROIT 26, MICHIGAN**

*General Offices: Lafayette Building*





## Building Airplanes in a Hospital

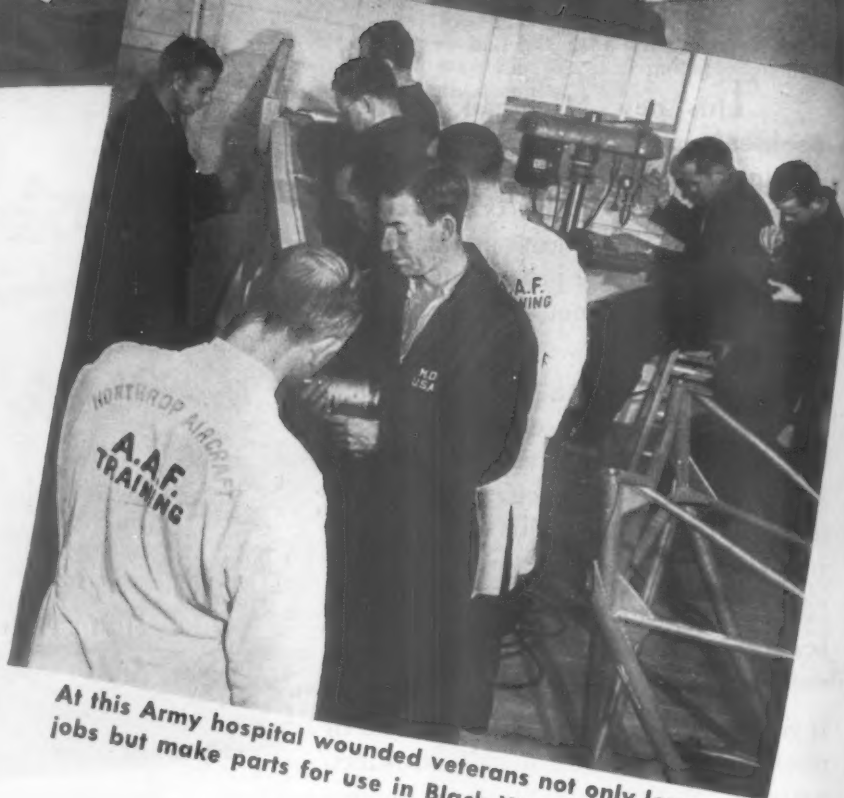
**I**N COOPERATION with the Army Medical Corps, Northrop Aircraft Company of Hawthorne, Calif., has installed a full-scale, fully equipped aircraft production department in the Army's Birmingham Hospital at Van Nuys, Calif. Here wounded veterans from practically every battlefield in the world make, assemble and inspect parts for actual use in Black Widow Night Fighters.

Neither temporary nor permanent physical handicaps are allowed to deter the veterans. The ingenuity of Northrop's staff has adapted the production equipment to the physical limitations of the men. A one-armed veteran, for example, operates a drill press, which ordinarily would require two good hands, because Northrop has installed a foot pedal adapter. Wheelchair patients have specially designed workbenches. Bed-ridden patients have benches that fit over the bed where they may sort, classify and inspect aircraft parts.

From the viewpoint of the Medical Corps, the Northrop experiment is a venture in new techniques in physical therapy.

Heretofore occupational therapy involved such innocuous tasks as making dolls or weaving baskets, chores which few veterans could get enthusiastic about. Now they take part in useful work which they know has real value in the war effort.

Northrop sees in this program something more than an immediate stop-



*At this Army hospital wounded veterans not only learn new jobs but make parts for use in Black Widow Night Fighters*

gap for injured veterans. In this department the aircraft plant expects to determine how best to adapt various jobs to the permanently disabled instead of expecting the disabled to adapt themselves as best they can to certain jobs to which they may feel that they are limited.

Morale among the veterans in the hospital is high. They are paid the regular aircraft wages for their classification which gives them extra money in addition to their regular Army pay. This is permissible by special order of the War Department.

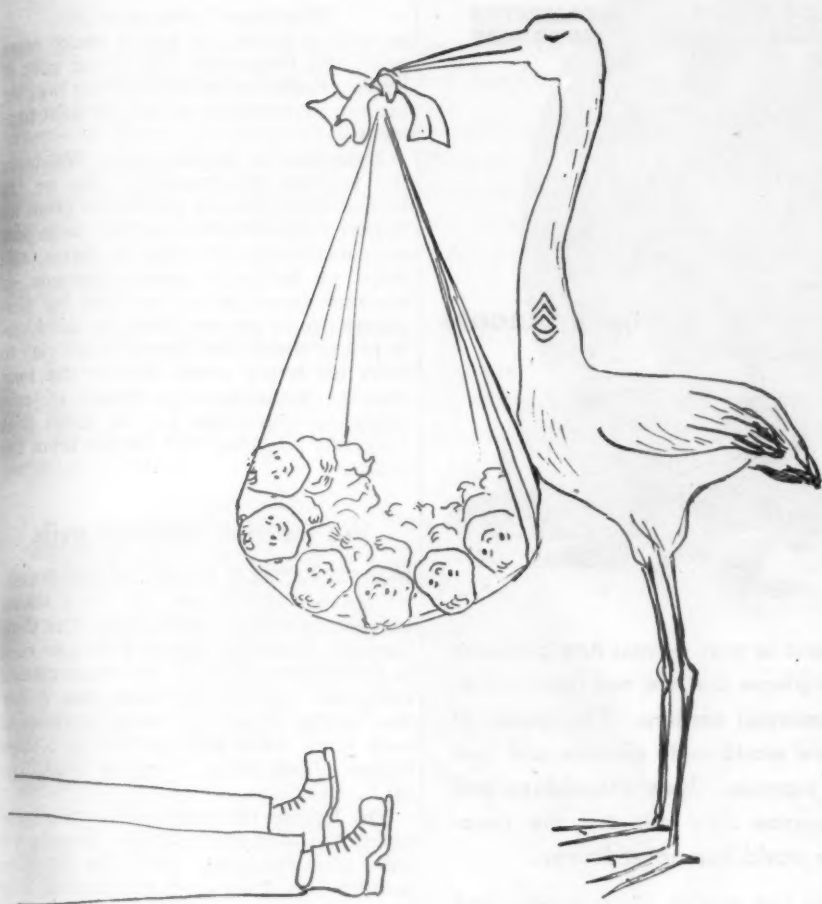
Allowed by the medical staff to work only three hours a day, most of the wounded grumble because they can't

work longer. By acclamation, the men ignore ten-minute rest periods.

Prior to entering the Northrop department, soldiers desiring to participate in the program are put through an intensive one-week lecture course to familiarize them with tools, color codes, etc. Groups of veterans participating in the program are periodically taken to the main Northrop plant where they may see how the parts they have produced are used in the Night Fighters.

Some of the patients are still suffering from shock. For these men, special sound-proofing has been installed so that they may be isolated from noises coming from presses and rivet guns.

—MARTIN NORTH



## Oh, what a lovely allotment!

What G. I. wouldn't faint with joy at sight of such a windfall as this? Half a dozen babies, all in one bundle, would mean money in the bank these days. At current army rates, they would add up to the fat sum of \$180 per month on one of those official family allotment checks.

But if you're entertaining any rosy visions of shattering the birth records with sextuplets, perhaps we'd better warn you right now that the stork is pretty stingy about matters like that.

In fact, he only passes out six-of-a-kind once in every 401,027,327 trips.

That's what it says in our biology book. We don't set ourselves up as scientists, so we'll take its word. It also says that friend stork's activities follow a pattern that can accurately be charted in actual figures.

Business and industry chart their production patterns in figures, too. But they need something more than natural law to help do the job. They need facts, clearly presented,

and they need them fast. They need an economical means of getting them. They have both in a machine that Management regards as downright indispensable.

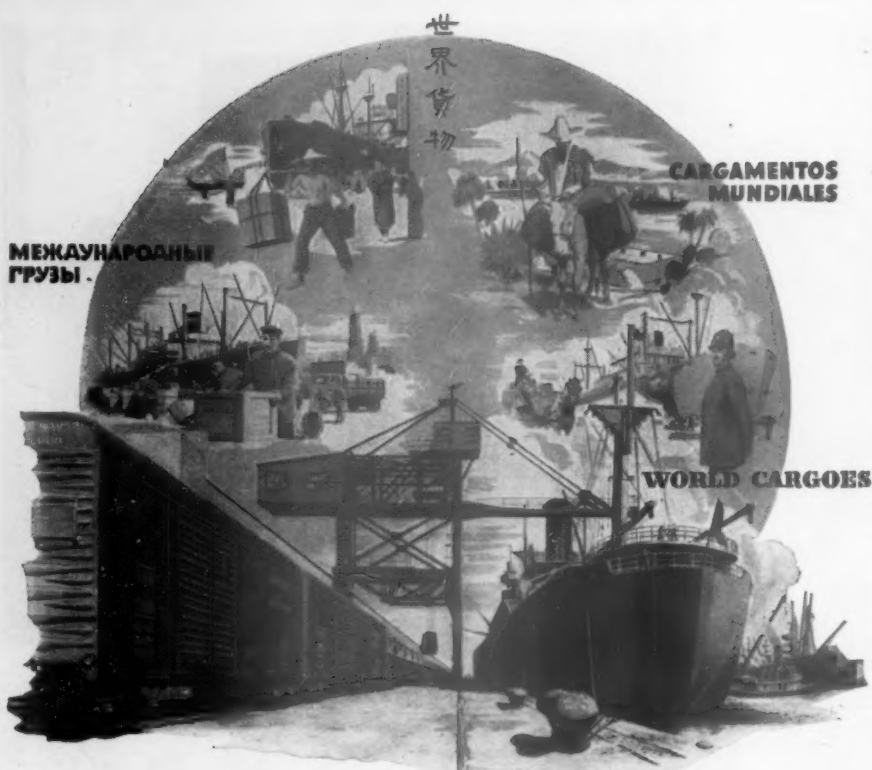
We mean, of course, the Comptometer, made only by Felt & Tarrant Manufacturing Company, 1712 North Paulina Street, Chicago 22, Illinois, and sold exclusively by the Comptometer Company.

### COMPTOMETER

REG. U. S. PAT. OFF.

Adding-Calculating Machines and Methods





In the world of tomorrow — after this war is won — vast new horizons will open for world commerce. Far away places that are war names now, give promise of becoming thriving commercial centers. The goods of America and of other nations will find new world wide markets and new uses. Trade will be carried on in many tongues. New friendships and new understanding . . . today and tomorrow . . . will lay the foundations for postwar commerce such as the world has never known.

America's expanded Merchant Marine, her wealth of resources, and her productive genius and capacity will put this nation in the strategic center of accelerated trade. Huge quantities of America's goods that will stream to world markets and the goods of other nations that will come to American markets . . . will move through the great port of Norfolk, Va. — served by the Norfolk and Western Railway.

Traversing one of the most productive manufacturing, mining and agricultural regions of America, the lines of the Norfolk and Western provide a direct route between the Midwest and the Virginias and Carolinas, to and from the year-round, ice-free port of Norfolk.

Today, the Norfolk and Western's extensive ocean terminals are handling cargoes of war . . . helping to speed the day of Victory. Tomorrow, when the war is won, the railroad's tidewater terminals at Norfolk will handle cargoes of the world . . . cargoes of peace and progress.

Tomorrow, as they are now, the Norfolk and Western's staff of foreign freight experts — men with years of training and experience — will be on hand to render every possible assistance to your export and import shipping problems.

# Norfolk and Western RAILWAY

PRECISION TRANSPORTATION  
BUY MORE WAR BONDS

## Inflation—Who Gets Hurt and How

(Continued from page 30)

in such a period he might make some gain; but frequently the rising cost of living presses so heavily on his lagging income that nothing is left for debt payment.

Everyone is a consumer. Whatever the worker, the business man or the farmer may gain as *producers* from inflation, they will lose in whole or in part as *consumers*. Whether a price rise helps or hurts a person depends on whether these gains received by producers are or are not offset by the higher prices which that person must pay to meet his living costs. But in the long run the disorganizing effects of currency derangements are so great that generally no group will benefit from the ordeal.

### We learned inflation evils

FORTUNATELY for the United States, we learned the importance of a stable currency early in our history. The Continental currency declined 65 per cent in the single year 1777. The depreciation continued until 1781, when the dollar was worth about one cent. Americans ever since have referred to worthless things as not being "worth a Continental."

The lessons of history are sometimes unlearned. For more than a decade we have been "playing" with the inflation powder keg. There is a widespread and informed opinion that what we have already done inevitably means a price level 50 per cent to 100 per cent or more above the prewar figure. If the rise comes slowly over a generation or some such period, less damage will follow; if it comes quickly, we must expect great social and political upheavals.

However there is no serious danger of a runaway price spiral if we have the courage to keep our budgetary deficits to an absolute minimum. If hard times come in postwar days and we listen to the demagogue who says, "Let us not put property rights above human rights," in his argument for bigger budgetary deficits and currency inflation, we must have the necessary insight to distinguish between safe and dangerous monetary policy.

This does not mean that the budget need be balanced every individual year, but it does mean that, over the course of years, the budget must be in substantial balance.

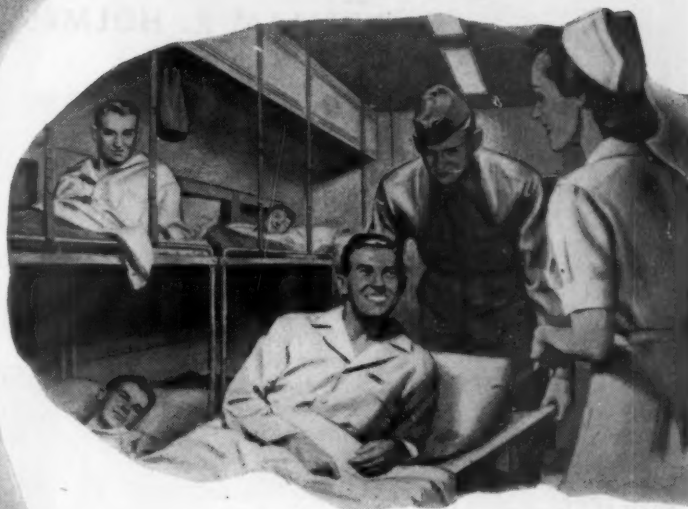
Above all, we must not permit monetary manipulations, when the economic machine gets out of balance, to substitute for the necessary price and cost readjustments which will again allow enterprise to march forward. There are no miracles in economics and we must not let the demagogue or politician mislead us.

## *Right* — for those who wear the Purple Heart

Now he's on his way. The hospital train will take him to convalescence close to home and family.

This hospital on wheels is staffed and equipped to handle his every need on the journey. Throughout, it is flooded with a new kind of light—cool and glare-free fluorescent. It is easy on the eyes of wounded men. It helps doctors and nurses do their jobs.

This lighting equipment, like everything else on the hospital train, is the last word. Fixtures and lamps are manufactured by Sylvania, which means they are built to one standard—the highest anywhere known.



## *Right* — for the blessed event

Whom the new baby looks like will be decided under fluorescent—and this softly diffused light will rest Mother's eyes.

Cool, comfortable fluorescent, with its high efficiency and accurate color control, will find many uses in the modern postwar hospital. And this new kind of light is the most economical known.

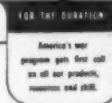
Fluorescent light that is engineered to hospital needs will be a specialty of Sylvania—pioneer in lighting, pacemaker in the fluorescent field. It will, of course, be made to Sylvania's one standard—the highest anywhere known. Sylvania Electric Products Inc., 500 Fifth Avenue, New York 18, N. Y.



# SYLVANIA

ONE STANDARD—THE HIGHEST ANYWHERE KNOWN

BUY WAR BONDS



### RADIO TUBES

— Sylvania was first to develop a complete line of 1.5-volt radio tubes which draw their power from a single dry cell battery. This made the camera-type portable radio set the rage of 1938. It also cut in half the battery weight our boys in the military communications services have to carry afield.



### ELECTRONIC DEVICES

— Heart of your postwar television set will be a cathode ray tube. This electron tube is one of many types that Sylvania is even now producing. Work in the field of electronics is a definite part of Sylvania's activities.



### LAMPS AND FIXTURES

Sylvania is pioneer in lighting — pacemaker in the fluorescent field. Sylvania is the leading manufacturer of fluorescent fixtures. Sylvania lamps in Sylvania fixtures give fluorescent performance at its finest — light that is right.





# We Play Zero to Win

By WILLIAM K. HOLMES

## LET'S MIX a metaphor.

Zero is a lamp for the future. The storage of foods at below zero temperatures for home consumption may change our way of life. Not upset it—change it. Improve it, bring more money into circulation, re-form our cities, reduce the divorce rate, flatten out unemployment troubles, create new business for manufacturers, offer new jobs, increase the pleasures of the table, lessen the troubles of the farmer, restore life to the small towns—

Sounds like the prospectus for a new elixir of life, doesn't it?

But consider for a moment:

No people in the world ever transformed extravagances into commonplaces as rapidly as the Americans. We moved from dusty roads and high-wheel buggies into six-lane highways and 100 octane gas. We learned to talk over wires. Now real estate agents apologize in advertisements if the two-cow farms



**HOME** or community storage of food at very low temperature promises to change public buying habits to the benefit of packers, transportation agencies, farmers, and the public

In the community frozen storage locker food may be stored indefinitely

they offer for sale lack telephones in the parlors and egg-boosting electric lights in the henhouses. We unhitched the horses from the old street cars and went underground. Because our legs hurt after climbing one flight of steps we up-ended streets and ran elevators 60 stories high.

In a word, if it's good we want it. We pay for it. We get it.

Forty years ago deer hunters asked the manager of the ice plant in Chico, Calif., to store the carcasses they had brought in. In earlier years they had eaten venison until they were sick of it. They gave the balance away to friends who also grew sick of it. The new idea spread. Individual lockers were put in cold storage plants for the accommodation of customers. A smart man fished through the ice in Northern Michigan.

The fish stiffened like bone in the 25 degrees below temperature. So the "deep freezing" idea was born. Quick frozen fish tasted fresh.

The deer hunter and the fisherman promoted a business.

Glance at the possibilities:

Thirty manufacturers now have plans for marketing home-freezing units after the war. No doubt there are others. No doubt, also, that practically every manufacturer who is tooled for making such things will be hard at it. Not much information is to be had at this moment. They are as competitive as race horses. Each has a new model he believes is finer than all other models, and the exact trend is still to be defined. Communities will be served by locker plants and householders will have their own equipment. J. H. Ashbaugh, vice president of

the Westinghouse Electric and Manufacturing Company, has stated that:

"Of the 1,500,000 subscribers to frozen food lockers, 400,000 hope to own a home freezer after the war. Consumer interest seems to be centered on five different sizes of home freezers, ranging from four to 40 cubic-foot capacities. However, because extensive field testing of experimental models is still under way, the number of models and the sizes of home freezers have not yet been determined."

Boyden Sparkes bought a home freezer for \$550 and became so enthusiastic that he wrote a book about zero storage. He believes that, when things settle down after the war, a home freezer may be bought for little more than the cost of a first rate mechanical refrigerator today.

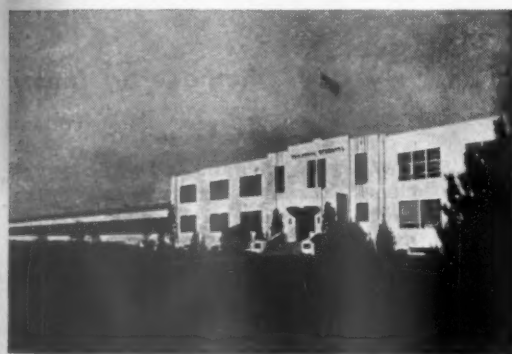
"If your family," he writes, "is one of

*"Right  
here,*

**MR. PRESIDENT ...**



**LEADING WAR ACTIVITIES CENTER** of the San Francisco Bay region because our hundreds of peacetime plants in many diversified lines were easily adapted to war needs. 12 shipyards on this mainland side of the Bay have built more than 25% of the Nation's wartime tonnage. Huge Army, Navy and Coast Guard establishments, built before



the war and now greatly expanded, make Metropolitan Oakland Area a Government wartime and peacetime center of first importance.

**150 NATIONALLY KNOWN MANUFACTURERS** have plants here. Upper: Standard Brands of California. Lower: Loose-Wiles Biscuit Co.

**METROPOLITAN  
OAKLAND AREA**  
CALIFORNIA

*Mainland Gateway to the  
Postwar Markets of the Orient*



**The NATURAL Industrial Center of the NEW West**

ALAMEDA • ALBANY • BERKELEY • EMERYVILLE • HAYWARD • LIVERMORE • OAKLAND • PIEDMONT • PLEASANTON • SAN LEANDRO • RURAL COMMUNITIES OF ALAMEDA COUNTY

**"At the STRATEGIC DISTRIBUTION CENTER of the INDUSTRIAL NEW WEST,** the most favorable location for low-cost distribution . . . by rail, by air, by water, by highway.

"You see, Metropolitan Oakland Area is the western terminus of three transcontinental railway systems. And it is served by transcontinental airlines which are planning greatly expanded service after the war. This will be a big peacetime center for air freight to all parts of the Orient . . . and the World.

"This fastest growing industrial center is also a world port, with deep-water harbors and concrete and steel terminals and warehouses unexcelled in the West. Postwar trade with the Orient will provide an enormous outlet for your goods.

"As terminus of many contract and common carrier truck lines, Metropolitan Oakland Area is exceptionally well qualified to serve your company by distribution over the Coast's 27,000 miles of surfaced highways. Terminus, too, of four transcontinental bus lines."

**FROM MANY OTHER STANDPOINTS** Metropolitan Oakland Area would be the ideal location for your western plant. If you, like so many manufacturers, are working on West Coast peacetime plans, we suggest that you tell us your requirements so that we may submit, without expense to you, a *Confidential Special Survey* compiled especially to fit your operation. It will pay to have all the preliminaries settled so you can let contracts for your new plant as soon as the war is over.

Our free booklet, *Facts and Figures*, gives a brief outline of the highspots of the Metropolitan Oakland Area story. May we send you a copy? **3426**

**METROPOLITAN OAKLAND AREA**  
389 Chamber of Commerce Building, Oakland 12, California



the 19,000,000 relying for some of its comfort on such a refrigerator in your kitchen, doubtless you were moved to buy it largely because of its economy. Definitely it costs little to run it, and a further factor is the lowered cost of food through the avoidance of spoilage."

### Demand for frozen storage

SO there is a potential postwar market of 19,000,000 customers, which is worth the attention of America's large-scale manufacturers. That may be just the beginning, as rural electrification spreads and hundreds of thousands of farm families which have been keeping the butter firm by lowering it in the well are attracted by the economies and conveniences of zero storage. Already the War Food Administration has been forced to issue a significant statement "for trade and administrative use":

"Demands for new frozen food locker plants and expansion of similar existing facilities have reached such proportions that the War Production Board has found it necessary to tighten requirements governing these installations."

In simpler language that means that, while we are winning the war, we cannot spare the manpower and metals necessary to supply the demand.

Zero storage of family-owned foods today is divided between community plants and home installations.

Estimates are that about 5,800 com-

munity plants are operating today. At a guess, plans for building 2,000 more have been held up by the war. The Rural Electrification Administration has financed eight cooperatively owned plants ranging in cost from \$16,265 to \$40,000, which may be taken as the price range. The average plant has from 400 to 500 lockers. The number is limited in practice by the radius of service. Experience has shown that farmers object to bringing their fruits and meats and vegetables more than ten miles.

As the community locker plant spreads, however, it is anticipated that more locker plants will be built for the primary convenience of residents of small towns and rural communities. They can buy foods when markets are glutted and prices have sagged and have them stored for future use. The savings vary with the location and the markets, but the economies and the convenience have been demonstrated. Locker tenants may buy a side of beef—to use this as an illustration—have it cut into convenient pieces, wrapped in oiled paper, labelled and frozen to five degrees below zero. When the housewife wants a steak she consults her records, tells the locker clerk to go into the cold room and bring her No. 275 A, and goes home happy.

A woman in Michigan owns a little five-quart-a-day berry patch ten miles from town. It does not pay to drive to market with a hatful of berries. In the past she picked her berries only when

she was bound to town anyhow, which meant she lost much of her crop and another part was either immature or over-ripe. Nowadays she picks her berries when they are just right, frosts them in the "cold barrel," and, when she has a marketable lot, turns it over to the refrigerated truck which makes periodic rounds from the locker plant.

The plant manager handles the berry business for all the growers in his area and feeds them out to the market when the berry price has recovered tone after the summer glut. In some localities central locker plants have been set up which serve as many as ten branch plants, within a radius of 30 miles.

The processing operations—slaughtering, packaging, deep freezing—are carried on in the central plants and the branch plants are merely overgrown frozen storage units.

The test of operation has demonstrated that the community plant, conservatively operated and efficiently managed, will, in most cases, make a fair return on the investment. Unfortunately, the professional promoter has gotten into the field with his four-colored prospectus and his fast talk. Observers in the government departments interested fear a repetition of the creamery boom of some years ago. Today most agricultural communities have a creamery serving a definite need at a fair return to the investors. But, for a time, the creamery wave washed very high and a good many wrecks were left stranded. The Department of Agriculture suggests that, before a community undertakes to build a locker plant, the field be carefully studied. Contracts should be signed with a sufficient number of locker tenants to cover the costs of operation or trouble may almost be guaranteed.

### New type home refrigeration

THE household freeze unit operates in a different field.

Women have gained new ideas of efficiency through employment in war work. The General Electric Company made this discovery as a result of questionnaires. As a result of this and other inquiries the postwar refrigerator—to be issued as soon as it is practicable to market new models—will be free of dark corners. Everything will be easily accessible. Some manufacturers are thinking of "Lazy Susan" models in which the shelves may be revolved. There will be deep-freezing compartments in which vegetables and fruits from the housewife's own gardens and orchards may be kept. This will be easier, surer and cheaper than canning.

The colors will be gorgeous. The kitchen may be the showplace of the house.

A survey by the U. S. Chamber of Commerce indicates that upwards of 1,750,000 families plan to use their war bonds and other savings for new refrigerators within six months after the war.

Rural electrification will expand. Only 40 per cent of 7,500,000 farm dwellings



LILLY JOSS FROM BLACK STAR

**At home the frozen storage unit keeps ice cream, fruits, vegetables, meats ready for consumption the year round**



## A Taste of Things to Come

"WILL passengers have to *dress* for dinner?", one enthusiast asked on seeing Pullman-Standard's exciting designs for this railroad diner of the future.

No. But a natural question, perhaps. For this superb new car, in its decor and appointments, will rival the dining facilities of the finest clubs and hotels.

Novel arrangements of tables for one, two or four allow more comfort and privacy, give roomy passage through the car and permit swift, unobtrusive, convenient service with greater efficiency. The color schemes, upholstery and lighting are all in the spirit of a gay, unrationed tomorrow . . . no detail that will add to gracious dining has been overlooked.

In this pleasant atmosphere you will relax and enjoy delicious meals, prepared in immaculate kitchens, by chefs whose chief delight is to cater to particular palates.

As expertly engineered as it is ingeniously designed, this is the dining car of Tomorrow. This is the car sophisticated travelers will talk about.

In Pullman-Standard's exhibit rooms, forward-looking railroad men by the hundred are viewing the blueprints and designs for this and many other postwar cars of different types—designs ready to be turned into realities immediately materials are available. Yes, Pullman-Standard is ready!

★  
Use it up...make it do  
Wear it out...do without  
BUY MORE WAR BONDS  
★

**Pullman-Standard**

CAR MANUFACTURING COMPANY

CHICAGO • ILLINOIS

World's largest builders of modern streamlined railroad cars

Offices in seven cities . . . Manufacturing plants in six cities

© 1944—P. S. C. M. Co.



**TEA-A-TETE:** Tea for two or a full course dinner may be enjoyed when you desire privacy. The novel shaped tables permit ease of service.



**COCKTAIL CORNER:** In this smartly decorated alcove groups gather for gay chat and refreshing appetizers. A pleasant and popular place in which to meet and entertain friends.



# MONROE PRECISION

*with the aid of*

## ELECTRONICS

Monroe engineers have been pioneers in adapting the wonders of electronics to the precision manufacture of Monroe machines, creating products whose dependability and versatility play a vitally important part in speeding the figures and records of business.

Thus are scientific achievement and unsurpassed engineering skill combined to help offices everywhere meet the problems of manpower shortage.

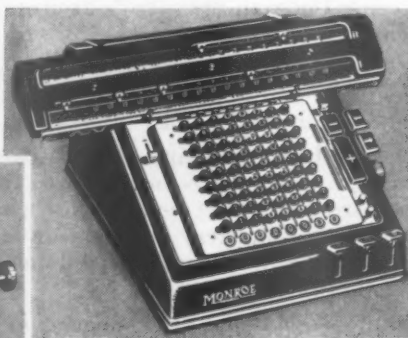
Payroll calculations and records; statistics; analyses; estimates; reports; invoices; costs and percentages; inventory; posting and accounting proce-



Monroe 209-485-191 Accounting Machine

dures—these are the life blood of business. The job of Monroe is to keep this vitally essential work flowing... ready when needed, accurate.

Call the nearby Monroe branch... learn from our representative the availability of Monroe Calculating, Listing and Accounting machines under existing conditions. Let his experience aid you in effecting shortcuts and simplifications to make working hours more productive.



Monroe MA 7-W Calculator

Ask about our Guaranteed Maintenance Plan to keep your Monroes in top operating condition. Without obligation get your copy of the book

### MONROE SIMPLIFIED METHODS FOR PAYROLL CALCULATIONS

from our nearest branch, or write to Monroe Calculating Machine Company, Inc., Orange, New Jersey.

# MONROE

CALCULATING • LISTING • ACCOUNTING MACHINES

are now wired for electricity. The trade guess is that 300,000 units a year—freezing and zero storage—will go to farms. American manufacturers think that 500,000 units a year will go into export, as one result of the use in the war of refrigerating installations. Europeans have for centuries been satisfied to cool their food in caves and drink their water at room temperature.

But that is only a part, and perhaps the least significant part, of the post-war development of zero storage.

Competition will force grocers to install cold rooms. Already the sale of frozen foods has outstripped the supply. This is due in part to the war demands of course, but it has been demonstrated that the biggest profits come from milk that stays sweet, eggs that stay fresh, vegetables that stay crisp and green and fruit that stays firm and bright.

Americans want the best, will pay for it, and will get it.

The change in our national mode of life may be as significant as that brought about by the low-priced automobile.

### Farms need conveniences

ONE reason why cities are overcrowded is that there are fewer conveniences in the country. A daily visit to the grocery and meat market is out of the question for the farm wife. Man and wife, tempted by cash wages, the movies and blue plates, go to town. To use Iowa as a sample, the census figures show that the old folks are being left on the farm. Iowa had twice as many farm operators under 25 years old in 1910 as in 1940. The birth rate declines in harmony with the immigration from the farms. Fewer youth on the farm, fewer marriages, fewer babies.

That's a bad situation. There's worse to come.

Frank R. Wilson, census statistician, points out:

"The labor force expands at the normal rate of one per cent a year. But the productive efficiency of labor—due to machines, better factories, more intelligent use of manpower—expands at the rate of about two per cent a year per worker. This means that industry needs 1,250,000 fewer men and women each year."

But people are still leaving the farms and going into the overcrowded cities.

Many city dwellers would prefer to live in the country where they would find fresher air, lower rents, garden plots. The new improved roads and the fine, inexpensive automobiles help many to get away. But the matter of markets still bars their migration.

Zero storage may solve that difficulty. The man of the house may hold his job in the city. Get in and out by automobile or bus. His wife can pack the quick freezer with unsurpassed eatables from her own garden. If a period of slack work comes along, the man may putter about the place, secure in the knowledge that there is food in the house for an indefinite period. The end result—according to the enthusiasts, of whom

there are legion—is that the form of the cities will be changed.

Slums will be transformed into parking lots and fresh air parks. Our horse and buggy roads must give place to highways so the country householder may get home in a hurry. More and better automobiles will be demanded. The downtown business district may be given over to the "exclusive" little shops, the residential area may broaden its avenues and the shack-infested fringe which too often borders the cities will become—or may become—community clusters where men who work in the city live on their half acre or acre farms.

A change in farm conditions is suggested. The New York Times editorially points out that each horse or mule uses from three to five acres of good soil to provide hay and grain. The inference is that the small farms must be mechanized as rapidly as small machines can be built to operate efficiently on them.

"The nation's 6,000,000 farms will gradually become electrified. Aside from the comforts it will bring to rural living, the economic result will be that the farms can be operated more efficiently."

### Markets may be stabilized

WITH more efficiency and greater comfort on the farm, the farmer's contentment will increase. The youngsters will stay with him. On an electrified farm the season's produce may be zero stored and sold at remunerative prices instead of being rushed onto a falling market. That suggests more money in the overall's pocket, the rebirth of the small town, a restoration of stable values to rural and local communities, and a citizenry less likely to be driven into political follies by unpleasant conditions and environments.

"You'd think," said Statistician Wilson, "the packers would be unfriendly to quick freeze and the zero locker. Fact is they like the idea. They think that they will teach the people to eat more meat, and that's what they have to sell."

The utility leaders like it, too. They see a market for more electricity. The more they can sell, the more cheaply they can sell it so that they can sell more. *Ad infinitum*. The transportation people see in the new idea a possible relief from some part of the terrific gorges of farm freight followed by periods when freight cars lie idle on side tracks. Some of the grocers have given the community plants locker space in their stores, because the more people who come through their doors, the more customers they have. The bankers are reported to be friendly.

And Boyden Sparkes says an entire dinner, from soup to pie, can be baked on Labor Day, deep frosted and zero stored, and put on the Christmas table with all the aroma and epicurean delight of fresh baking. That should get the attention of the housewives.

At any rate that is what the great corporations which manufacture the things we want think about them.



"THE BEST KNOWN

VEHICLES IN AMERICA!"

**RAILWAY EXPRESS** Service began 105 years ago. Its purpose was, and is, to deliver shipments of every description *direct* from their senders to their recipients safely and at high speed. Today, this means fast trains co-ordinated with super-swift transport planes.

Expressmen, in 1839, used spacious haversacks for "pick-up and delivery" of shipments. Then expanding business required horse-drawn vans. These were quickly followed in their turn by the speedy, specialized vehicles of the modern motor age.

Today, Railway Express uses 15,000 motor vehicles. They perform pick-up and delivery service of shipments in all cities and principal towns, without extra charge. Driven by Expressmen who have proud records for coolness, skill, and observance of safety-first rules, their ceaseless rounds have made them *the best-known vehicles in America*.

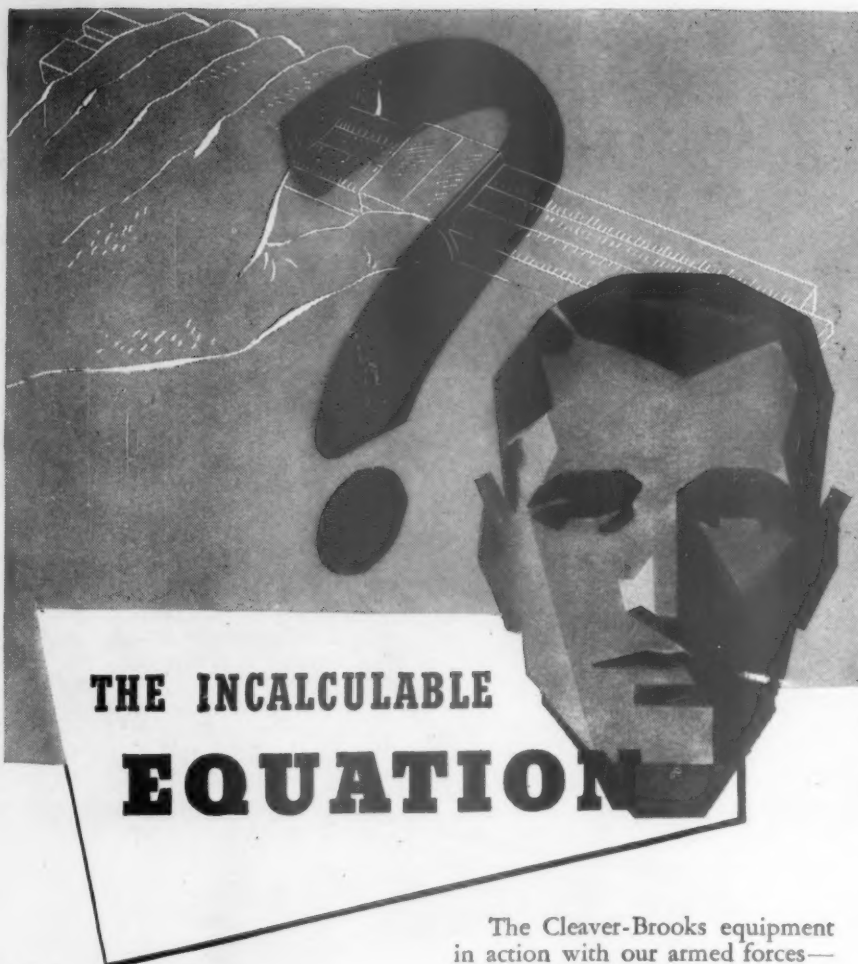
You can help us carry our share of America's war-time shipping and serve you better by doing two simple things: Pack your shipments securely — and address them clearly. Our century of experience proves that "shipments started right are half-way there."



**NATION-WIDE**

**RAIL-AIR SERVICE**





## THE INCALCULABLE EQUATION

**NATURAL** forces are measurable—can be expressed in laws, principles and formulae. But man's mind—able to put natural forces to work by calculation—is itself beyond calculation. A problem, considered insurmountable by some, challenges others until solved simply because some minds cannot accept resignation.

The spirit of challenge—the refusal to be complacent—the constant drive to find a new and better way of doing things is a precious endowment. An organization possessing it has a resource beyond estimate.

Here, at Cleaver-Brooks, we try to foster the challenging attitude of mind. The equipment we manufacture was not created without meeting and overcoming obstacles in the form of skepticism and resistance to something which was not in accord with the time-honored way of doing things.

The Cleaver-Brooks equipment in action with our armed forces—which includes water-distilling units, disinfectors, sterilizers, and steam generators—had to offer advantages beyond the ordinary to be drafted for such service.

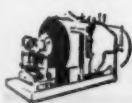
The men and women who work at Cleaver-Brooks are confident that the challenging spirit—the will to build better or explore the new and untried—will continue to have its rewards in days of peace to come—in the manufacture of efficient machines for the world after victory.



Common salt sea water is converted into pure, crystal-clear distilled water for drinking, cooking, and other purposes by Cleaver-Brooks portable distilling units, specifically built for the Army, Navy, and Marine Corps.

## Cleaver-Brooks COMPANY

Milwaukee 9, Wis.



Steam Generators



Food Processing Equipment



Tank Car Heaters



Oil & Asphalt Heaters



Special Military Equipment

## Taking War Surplus in Stride

(Continued from page 27)

the army unwittingly accentuated the price boom and the ensuing reaction by withholding disposal of the surplus for at least six months after the war. Thus, when it finally let go, it added to a supply that was catching up with the demand.

Any estimate of the surplus at the end of this war is a hazardous guess. The war is still on; it is a war of surprises, in which the needs of the military forces change swiftly. The experience of World War I has only limited value for interpreting the current statistics of war production. There are three important contrasts between the last war and this one which have a bearing on our estimates of the surplus:

**First** is the progress toward completion of the war procurement program.

**Second** is the degree of mechanization and specialization of material.

**Third** is the extent to which supplies have been shipped abroad.

At the end of World War I, our ordnance program had hardly hit its stride. Full and balanced production was not expected until the middle of 1919. Such supplies as could be readily obtained piled up while others were in the process of development. By November, 1918, the quantity of American guns and ammunition in the battle area was negligible. The surplus abroad was mainly in finished goods, of the kind that would come under the head of miscellaneous quartermasters' supplies. Originally costing \$2,000,000,000, our surplus in Europe was disposed of—the bulk to the French—for slightly less than \$500,000,000.

The domestic surplus, roughly one and one-half times the foreign remainder, included a substantial fraction of raw materials. Altogether, the surplus of World War I comprised some 250,000 different items, including a two years' supply of wool, large quantities of copper, nitrates, machine tools, and canned goods.

Of the \$5,000,000,000 original cost of the 1918 surplus the Government realized about \$1,400,000,000. The total production of World War I, including ships not finished till 1941, was about \$17,000,000,000.

Against that background let us examine the current picture. First, as to the stage of completion of the program:

War output has passed its peak, which was probably reached in the first quarter of 1944 at about \$7,000,000,000 a month. The procurement problem from this point on is one of stabilizing the supply. The Army and Navy have already made significant progress in this direction.

Many a procurement officer is embar-

Report No. 6 on  
**HONESTY ENGINEERING**  
—a new idea in  
**Personnel Relations**



**T**HE words above are typical. Employers like Honesty Engineering because it helps reduce the personnel losses that hurt most—losses of those trained and trusted employees who “didn’t mean to steal” but did. Case studies show that this unique Personnel-Protection Plan, developed and pioneered by the U. S. F. & G., has reduced substantially the number of men and women discharged for dishonesty.

The Personnel-Protection Plan not only insures you against financial loss through employee dishonesty but: (1) discloses

undesirable personnel and prevents waste in training; (2) applies tested methods that keep good employees from going wrong; (3) helps employers eliminate leaks, pitfalls and careless acts that may lead to employee dishonesty.

Whether you employ 10 or 10,000 people, your U. S. F. & G. agent will be glad to show you how this plan helps you keep employees by keeping them honest. Consult him today.

*Branch Offices in 43 Cities  
Agents Everywhere Handling all Forms  
of Bonding and Casualty Insurance*

**U. S. F. & G.**  
**UNITED STATES FIDELITY & GUARANTY CO.**  
*affiliate:*  
**FIDELITY & GUARANTY FIRE CORPORATION**  
**HOME OFFICES: BALTIMORE, MD.**

Consult your insurance agent or broker as you



would your doctor or lawyer





# Georgia\*

GEARED FOR ACTION



TEXTILES



COTTON



FARM CROPS



LIVESTOCK



MANUFACTURING



TIMBER



TOBACCO



MAN-POWER



MINERALS



\*This is one of a series of advertisements featuring the six States served by the Seaboard Railway.

Georgia—largest state east of the Mississippi—has made tremendous strides in the past two decades. Raw materials abounding in almost incredible abundance and variety, combined with unusually favorable conditions for manufacture, have resulted in the investment of millions in Georgia industry. In agriculture, diversification is the order of the day, and Georgia takes high rank in the production of a wide variety of farm crops, in dairying, poultry raising, livestock and in the growing of fruits and vegetables.

Today, Georgia's farms and factories are contributing in fullest measure to the winning of the war. Georgia is geared for action! Looking to the future, an alert State and its people are planning for even greater things to come.

The Seaboard Railway has played a vitally important role in Georgia's onward march of progress. With coordination inspired by a common cause, the Seaboard will continue to work with Georgia in the building of a greater and more prosperous State in the years ahead. Seaboard Railway, Norfolk 10, Virginia.



passed when he looks back and sees how far original estimates of requirements missed actual field experience. Today the spread between the procurement program and actual requirements has been narrowed. On items that can be produced within a short time, reserves appear to have been stabilized at an average of six months' field requirements. In the case of foodstuffs, the reserve is figured for a shorter period. For capital items like ships, which need a long production schedule, the goal of six months' average requirements is, of course, less tenable.

Similar progress has been made in stabilizing the inventories of war contractors. Despite the increase in production and shipments through 1943, war inventories held close to a total of \$10,000,000,000. Raw materials and goods in process accounted for \$8,000,000,000 finished goods made up the other \$2,000,000,000. The War Production Board and the War Contractors may share credit for this achievement in holding down the ratio of inventories to output and thus reducing postwar surpluses.

Because of this progress, earlier guesses of \$75,000,000,000 to \$100,000,000,000 for the war surplus now appear as gross exaggerations. We shall be adding in a generous allowance for early mistakes, war-obsolete left-over unused stock piles and the lag in cancellations of war contracts, if we settle on \$50,000,000,000 as the original cost of the overall surplus. (Incidentally, we are talking solely of supplies, excluding war plants and their equipment.) That figure, roughly equivalent to eight months' peak production, is only our starting point. We need to whittle it down to its market meaning.

Actually, in this highly technical and highly mechanized war, more than three-fourths of the production is in specialized combat ordnance with which business in general will have little or no concern. That may be gleaned from the following summary of the four years' procurement since July 1940:

## War Procurement, July 1, 1940 — June 30, 1944 (in billions of dollars)

Supplies	
Aircraft .....	41
Combat aircraft .....	39
Transports .....	2
Ships .....	32
Combat vessels .....	23
Merchant shipping .....	9
Guns and ammunition .....	21
Trucks .....	5
Clothing and equipage .....	7
Food .....	7
Other munitions and supplies ..	21
<b>Total</b> .....	<b>134</b>

War Construction	
Military installations .....	17.5
Industrial plant and facilities ..	15.5
<b>Total</b> .....	<b>33</b>
<b>Total, actual and scheduled</b> ..	<b>\$167</b>

We can see that more than half the

value of the war supplies is in aircraft and ships. Another quarter, at the least, is in guns, ammunition and the category of "other munitions," including electronic items and specialized communications equipment of which only a fraction can be converted to civilian uses.

Airplanes under our war program have passed the 150,000 mark; less than ten per cent is in transports. Obsolescence will fast reduce the value of the military planes, and 2,000 transports would care for a vastly increased worldwide commercial air traffic until new models rendered the present models competitively impracticable. The temper of the industry is generally to treat the war surplus in planes as suitable gifts to educational institutions and move into new ground from a modest start, with the hope of steady growth to meet future air demands.

### Many ships will be needed

AS FOR the new ship capacity, which is five times what we had in 1939, there will be no cause to think of ships as surplus during the immediate postwar period. The demobilization of our armed forces abroad, and the huge requirements in first aid to the war-torn nations—estimated at 46,000,000 tons during the first six postwar months—will keep our ships busy. There should be ample time for the development of national policy in the distribution of what is deemed surplus to American shipping requirements after the war.

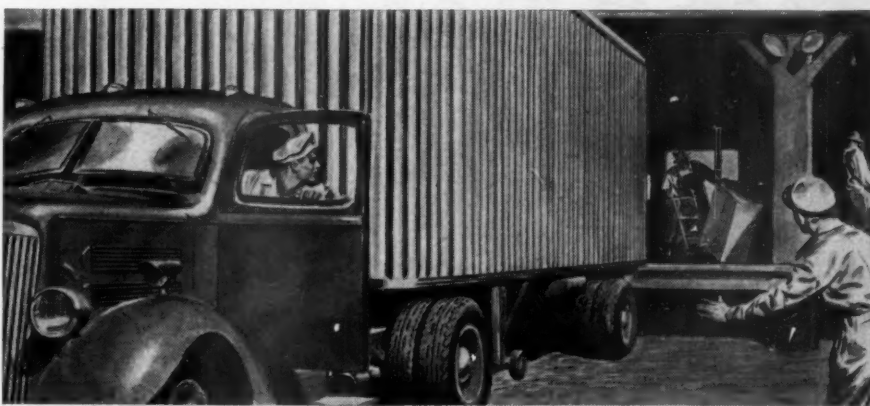
If we put aside aircraft and shipping, along with combat ordnance, as the affair of public administration rather than commercial disposal, we come to a figure of something under \$12,000,000,000 as representing the original cost of what may be merchantable war stocks. This figure may include roughly \$3,000,000,000 in clothing, equipage, textiles, and other soft goods; \$3,000,000,000 in motor vehicles, parts and accessories; \$1,500,000,000 of foodstuffs; \$1,000,000,000 in government controlled stockpiles of raw materials. The remainder \$3,000,000,000 plus would cover the presently indeterminate stock of other products, such as machinery, tools, hardware, and engineering equipment (including tractors, cranes, transport equipment and structural steel), chemicals and a variety of portable communications.

How much of this total will be a factor in the domestic market? In the last war, nearly 40 per cent of the military surplus was abroad. This time, with our war effort developed on a global scale, we may assume that at least \$7,000,000,000 will be abroad, leaving \$5,000,000,000 in domestic stocks.

The pressure to make our foreign stocks available to the nations devastated by the war will be a major factor in determining their disposal. Nearly 30,000,000 Europeans, uprooted from their homes through labor drafts and evacuations, will need immediate relief. In foodstuffs alone, the UNRRA estimates the American share in the European relief at 9,500,000 tons for the first



1. Right from the landing craft, bulldozers pull trailers loaded with everything from machine tools to heavy graders and road rollers—ready with equipment to prepare beachheads for our troops. Trailmobile makes thousands of military trailers—for scores of vital uses.



2. Just as war-vital, backing up the beachhead operation on far fronts, are the commercial trailers here at home, highballing their millions of tons of supplies, and linking every point in the nation to every other point.

## Seabees' Motto: "CAN DO-WILL DO-DID!"

**M**OVE A SMALL mountain in no time at all to make a landing field. Repair a bombed-out city's docks, streets. Clear a battlefield of shells, shot-down planes, crippled tanks.

The Seabees can do it—will do it—and have done it. Moving right in with invasion troops, the Seabees clear the way for our assault forces.

to move forward. Helping them is the best military Motor Transport in the world—thousands upon thousands of trucks and trailers!

Here at home, trucks and trailers equal this tremendous military performance with *flexible* Motor Transport—rushing wartime deliveries despite too few men, vehicles, tires and repair parts.

### GOOD NEWS—NEW CIVILIAN TRAILMOBILES!

► Under Government allocations, Trailmobile is making civilian trailers again—to help bring long-due relief to our over-worked home trans-

portation system. Several thousand Trailmobiles will be produced with no let-up in building equipment for our Armed Forces.

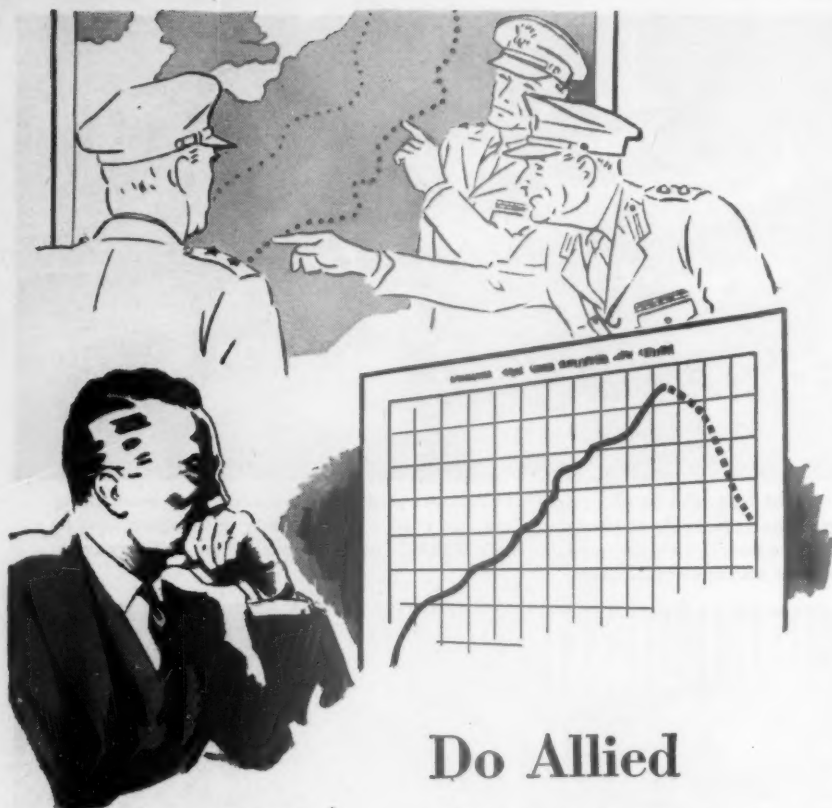
THE TRAILER COMPANY OF AMERICA, CINCINNATI 9, OHIO—BERKELEY 2, CALIF.

# TRAILMOBILE



Commercial Trailers for War and Peace . . . . . The Vital Link in Flexible Transportation





## Do Allied Military Gains bring you closer to Credit Losses?

Each item of good news from overseas emphasizes an impending business risk! Transition from war to peace will be full of uncertainties and upsets. War industry's shutoffs, layoffs and payoffs will jolt many a business. But what companies will be hit? How hard? How soon? Nobody knows.

On one point, however, you can be sure: *With American Credit Insurance, your accounts receivable will be protected... now... and in the uncertain future.*

American Credit Insurance GUARANTEES PAYMENT for goods shipped... pays you when your customers can't... keeps you from worrying and waiting indefinitely for settlement... puts a definite cash value on your accounts receivable.

Manufacturers and wholesalers in over 150 lines of business now carry American Credit Insurance. You need it too. For further information, write for our booklet, "The A-B-C of Credit Insurance." Address: American Credit Indemnity Company of New York, Dept. 41, First National Bank Building, Baltimore 2, Maryland.

*J. A. McFadden*  
President



## American Credit Insurance

*Pays You When  
Your Customers Can't*

OFFICES IN PRINCIPAL CITIES OF UNITED STATES AND CANADA

six months. The stockpile abroad is not believed to be that large.

Hardly less necessary than food and clothing (used as well as new) will be motor vehicles and other transport equipment. Medical supplies, tools, soap and cotton and woolen goods will also be urgently needed.

When hostilities end in the Pacific, only a small part of China's most urgent requirements seem likely to be met by our surpluses in the Far East. The Chinese Government, estimating that 84,000,000 of its people will need relief, has set, as an irreducible minimum for first aid to that country, 3,200,000 short tons of food and 12,000,000 short tons of other foreign goods.

What it comes to is that, apart from the obvious relief problem, the trade requirements for the restoration of war areas will not only absorb the bulk of our merchantable surplus abroad, but leave an active market for American goods needed in the reconstruction. The chances are that only a negligible fraction of the surplus abroad will be returned to our shores.

In the domestic war surplus the estimate of \$5,000,000,000 would include:

1. The inventory of Army and Navy supplies stored in this country.

2. The merchantable goods in the inventories of the war contractors, to which Uncle Sam will have title. The bulk of war inventory is in metal goods; the contractors generally assert that the military specifications preclude their use, with few exceptions, in normal trade channels. Nevertheless \$1,000,000,000 of the surplus contractors' inventory should become available for postwar trade.

There is obviously no reliable basis at this time for a detailed quantitative listing, by items, of the surpluses to emerge at the war's end. But the general pattern of disposal prospects can be discerned, and may be roughly summarized as follows:

**1. Combat equipment:** Battle scrap will be so plentiful that our occupation forces can take up only a small fraction for salvage or ship ballast. Local thrift and ingenuity will have to take care of the rest. Our postwar military establishment will undoubtedly keep the serviceable combat equipment long enough to "see what happens" in the way of a trustworthy peace. But, once that is assured, obsolescence rates will be high. The armed forces will be eager to scrap the bulk of their equipment or sell it to friendly neighbors, so that the standby equipment may be kept up to date. This applies to aircraft as well as to armored vehicles, guns and general combat and signal equipment, in which experimental orders will probably continue after hostilities cease.

**2. Raw materials:** Metals Reserve, Rubber Reserve, Defense Supplies and other special buying agencies have



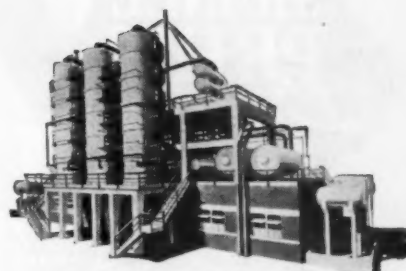
## FOR THE FIGHTER... AND HIS DREAM!

The fighter must have something to fight for as well as something to fight with. It is industry's task to back him with weapons today and tools tomorrow.

Blaw-Knox makes its own long list of war weapons, as well as basic equipment to aid other manufacturers in their war efforts. When the international reconstruction program begins, Blaw-Knox will supply a wide range of equipment to speed it. Blaw-Knox leads in many fields. For

example: rolls, mills and other essentials for the ferrous and non-ferrous industries... highly specialized fabricated products for railroads, public utilities, the electronic and construction industry and industry in general. For the chemical and process industries Blaw-Knox produces all types of equipment, even complete plant units.

Whatever your plans perhaps Blaw-Knox products and services can be useful to you. Let us discuss it at your convenience.



*A typical example of Blaw-Knox design and construction for the Chemical and Process Industry.*

# BLAW-KNOX

A PACEMAKER FOR  
AMERICAN INITIATIVE  
AND INGENUITY

2053 FARMERS BANK BLDG.,  
PITTSBURGH, PA.

*Buy More War Bonds and Stamps*

**LEWIS FOUNDRY & MACHINE DIVISION,**  
Rolls and Rolling Mill Machinery  
**POWER PIPING DIVISION,** Prefabricated  
Piping Systems  
**NATIONAL ALLOY STEEL DIVISION,** Heat  
and Corrosion-Resistant Alloy Castings  
**SPECIAL ORDNANCE DIVISION, York, Pa.**  
Bofors Anti-Aircraft Gun Mounts

**PITTSBURGH ROLLS DIVISION,**  
Rolls for Steel and Non-Ferrous Rolling Mills

**BLAW - KNOX DIVISION,** Chemical & Process Plants &  
Equipment, Construction Equipment, Steel Plant Equipment,  
Radio & Transmission Towers... General Industrial Products

**COLUMBUS DIVISION,** Ordnance Materiel

**UNION STEEL CASTINGS DIVISION,**  
Steel and Alloy Castings

**MARTINS FERRY DIVISION,**  
Bofors Anti-Aircraft Gun Mounts

**BLAW-KNOX SPRINKLER DIVISION,**  
Automatic Sprinklers and Deluge Systems

*Five Blaw-Knox Plants have been awarded the Army-Navy "E" for war-production excellence*

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ANTI-AIRCRAFT GUN MOUNTS    GUN SLIDES    LANDING BARGES    AERIAL BOMBS    POWDER PLANTS    PIPING FOR NAVAL VESSELS    SYNTHETIC RUBBER PLANTS  
CAST ARMOR FOR TANKS & NAVAL CONSTRUCTION    CHEMICAL PLANTS





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It takes Country Doctor's extraordinary blending experience, skilful selection of the finest tobaccos and a perfect moistening agent—all these three together—to get rid of bite and burn and to create such unbelievable, harmonious, satisfying effects—in puff after puff... Try Country Doctor Pipe Mixture! You'll like it.

## Country Doctor Pipe Mixture



25¢  
A Product  
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If your dealer doesn't have it—write Philip Morris & Co., Ltd., Inc., 119 Fifth Ave., N. Y.

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YET  
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THE  
SPIRIT  
OF THE  
SOUTH

100 PROOF

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TOAST  
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HOSPITALITY

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50% SWANEE PRIDE  
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DASH BITTERS, ICE,  
SHAKE & STRAIN  
DELICIOUS  
STRAIGHT OR MIXED

M.S. WALKER, Inc. BOSTON, MASS.  
MAKERS OF FAMOUS OLD MELODY  
LIQUEURS AND OLD MEDFORD BRAND RUM

about \$500,000,000 in reserve stocks of critical raw materials. These include copper, tin, chrome, mercury, silk, rubber and the ferro-alloy metals, of which manganese is especially important. These will undoubtedly be retained as emergency reserve and may also serve to stabilize supplies. There will be large quantities of aluminum, copper, steel, zinc, rope, lumber, high-octane gasoline, alcohol, shellac, wool, industrial diamonds and a miscellany of less prominent items.

**3. Durable Finished Goods:** Motor vehicles, particularly trucks, will be the chief factor in this category. In addition to the large number abroad, as many as 1,000,000 trucks may become available for domestic disposal. Quantities of radio equipment, mostly of uncertain conversion possibilities for civilian use, may be acquired on a speculative basis to see what can be done with it in the way of adaptation of parts. Housing equipment and hardware will become available immediately after hostilities end in Europe, to meet a part of the demand that awaits them.

**4. Clothing, footwear, blankets, towels, bedding, textiles, fabrics, cooking utensils, furniture and related personal goods.** Here we have the greatest variety: Only moderate quantities are likely to be retained by the military. Some of them are of the kind which has not been available to civilians during the war. Others will emerge in quantities representing more than a year's prewar production. On the whole they will represent less than a quarter year of prewar retail sales.

**5. Government-owned Machinery:** Of government transport equipment—tractors and other farm machinery—the major part is probably abroad, where it is available for the economic restoration of distressed areas. So far as can be ascertained the amounts stored in this country do not, in general, exceed the expected demand during the interim before retooling and reconversion processes have been completed. The distribution of these items through the established dealer channels may, however, have to be invoked to produce



## Fresh Fish for Stranded Men

An Emergency Fishing Kit issued to our fighting men is designed so that none in sight of water need go hungry for any length of time.

The unit, designed in cooperation with Roy Teller, famous Canadian guide, and the makers of Kingfisher Fishing Tackle, is extremely compact, measuring three inches square by one inch high. It con-

tains a varied assortment of hooks, lines, and baits suitable for catching fresh water and salt water fish up to 40 pounds.

It is molded by Federal Tool Corporation, Chicago.

For the man with no fishing experience, instructions are molded on both top and bottom of the box.

# Our Fighting Men Give Valor for Victory Chevrolet Builds Volume for Victory



Ever-increasing numbers of Chevrolet-built GMC "Ducks" carry our fighting men from boat to beachhead to Victory.

Chevrolet-built Pratt & Whitney engines power the B-24 Liberator—one of America's longest-range bombers.

## CHEVROLET DIVISION OF GENERAL MOTORS

Chevrolet-built Pratt & Whitney engines also power the C-47 and C-53 cargo planes—workingest airplanes in existence.

Chevrolet built ten per cent of all aircraft engines produced in the United States in 1943.

**BUY WAR BONDS... AND KEEP THEM!**

Great numbers of Chevrolet-built 90-mm. guns are destroying enemy tanks and planes.

Millions of Chevrolet-forged high-explosive and armor-piercing shells are blasting the Axis on all fronts.

Thousands upon thousands of Chevrolet-built military trucks are serving in all parts of the world.





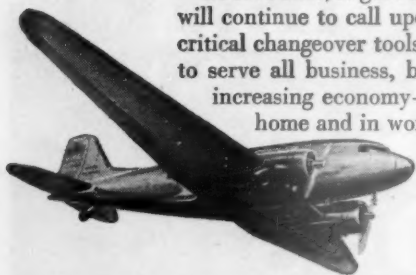
When the call is for

*Toasters—  
not Torpedoes*



War is the nation's number one job until the enemy surrenders—unconditionally! But even now, industry must plan for converting back to peace production—to provide jobs for millions of returning service men, in the fastest possible time.

To save time, to *gain* time—millions of man-hours of time—industry will continue to call upon AIR EXPRESS for the high-speed delivery of critical changeover tools and material. And AIR EXPRESS will continue to serve all business, but with greatly expanded services and ever-increasing economy—in searching for new opportunities both at home and in world-wide markets.



**A Money-Saving,  
High-Speed Wartime Tool  
For Every Business**

As a result of increased efficiency developed to meet wartime demands, rates have been reduced. Shippers nationwide are now saving an average of more than 10% on Air Express charges. And Air Express schedules are based on "hours", not days and weeks—with 3-mile-a-minute service direct to hundreds of U.S. cities and scores of foreign countries.

**WRITE TODAY** for "North, East, South, West"—an informative booklet that will stimulate the thinking of every executive. Dept. PR, Railway Express Agency, 230 Park Avenue, New York 17, N. Y., or ask for it at any local office.

**AIR EXPRESS**  
AIR EXPRESS  
*Gets there FIRST*

Phone RAILWAY EXPRESS AGENCY, AIR EXPRESS DIVISION  
Representing the AIRLINES of the United States

an orderly dovetailing of production and distribution schedules. A much larger problem will arise in the disposition of industrial equipment, especially machine tools. This problem is tied to the disposal of the Government's war plants, which represents a longer term operation than the disposal of supplies with which this discussion is concerned. The most promising program in this connection is to encourage the retirement of obsolescent machines and tools—(70 per cent of the prewar machine tools are estimated to be 15 or more years old) and move the balance to countries less highly developed in mechanized production.

**6. Foodstuffs:** As already indicated, the quantities held by the Government—with the possible exception of processed goods like syrups and jams—will be short of the immediate postwar demand.

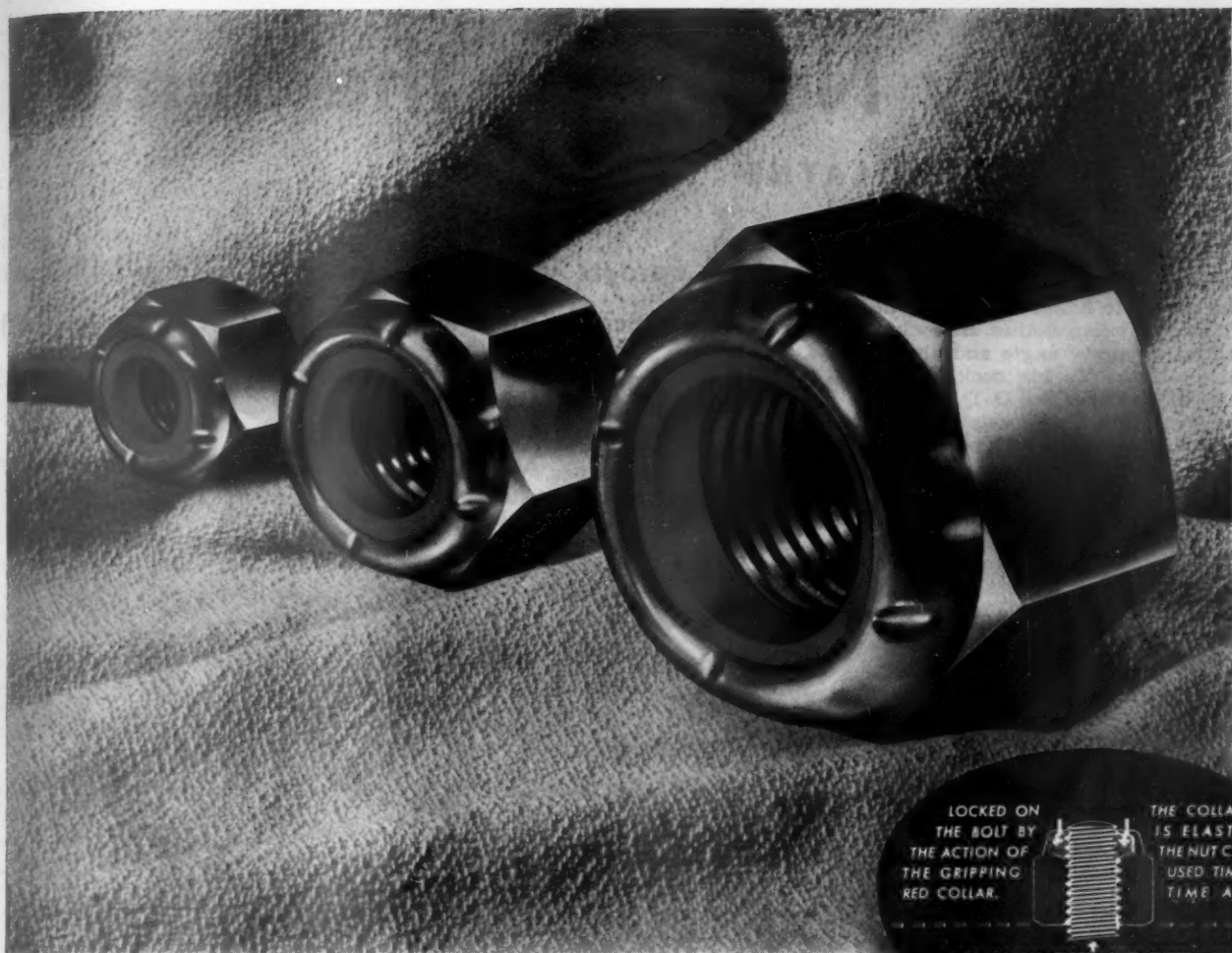
The quantity of supplies turned out by American industry in the present war is incomparably greater than the output for any previous struggle. Yet a surprisingly small fraction is destined to remain as surplus for the regular channels of domestic trade. More than three-fourths of the total war output is in aircraft, ships and armaments, subject to retention for military reserves, or government-to-government disposal, or out-and-out scrapping. Of the remainder, the greater part will be abroad, and countries devastated by the war will absorb most of it.

An estimated \$5,000,000,000 (in original value) of merchantable supplies will thus remain for disposal in the American market. This is less than the total American output for war material in any month of 1944. It compares with the prewar average monthly retail sales of \$4,000,000,000 (in 1940); and \$5,000,000,000 in 1943, despite rationing and war savings.

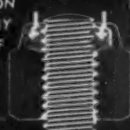
After the last war some 250,000 different items were listed for disposal from the military surplus. This time the variety will be even greater. In such a conglomerate, specific cases of excess supply are bound to arise, which will need special treatment to prevent distress in the particular industries involved. Careful timing of sales, after consultation with the industry, will often be necessary to minimize detrimental effects of government sales on the current market.

Undoubtedly many situations will require sagacious handling to avoid disruption of established business. At the same time we should not fix our notions of the prospective market on the prewar levels, but think in terms of the increased purchasing power as well as the increased capacity, which the war years have brought about.

The overall surplus—that is, the magnitude of the whole surplus as against the war time savings, deferred demand and new consumption levels of the American people—is well within the capacity of postwar American business to take in stride.



LOCKED ON  
THE BOLT BY  
THE ACTION OF  
THE GRIPPING  
RED COLLAR.



THE COLLAR  
IS ELASTIC,  
THE NUT CAN BE  
USED TIME AND  
TIME AGAIN.

MADE IN ALL SIZES AND TYPES — WITH  
THREADS TO FIT ANY STANDARD  
TYPES OF BOLTS.

## WHAT'S A NUT FOR?

**A** NUT is an important type of fastening.

It draws things together. It holds them. It is removable and replaceable.

But its chief job is to hold. If it ever loosens and lets go, it's not a good nut.

An Elastic Stop Nut always stays put. It grips fast without extra locking pins or gadgets. It locks anywhere on the bolt. And even severe vibration won't break its hold. Until you want to take it off it's on for good.

The reason is the elastic collar in the top. This collar squeezes

between and around the bolt threads. It hugs them with an unyielding grip. Since it is elastic you can use the nut over and over again.

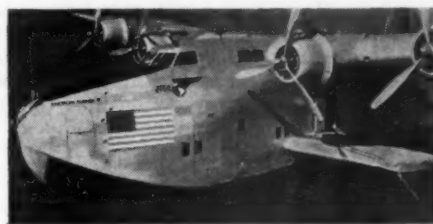
Today Elastic Stop Nuts are used by billions in building airplanes. A single bomber uses more than 50,000. That is because they are so secure and safe.

After a while you'll see these Esna nuts on many of the things you buy. You can tell them by their red collar.

And you'll know that the car, refrigerator, radio, or whatever it is, will be safer, last longer, and need less service.

## OK'D FOR THE RESPONSIBLE JOBS

*When Pan-American's great Boeing Clippers come home, they get a thorough going over. 185 skilled mechanics in 8-hour shifts have the Clipper ready to go again in 48 hours. The many thousands of Elastic Stop Nuts that fasten these ships cut inspection and servicing time and contribute greatly to their quick "turn-around."*



# ESNA

TRADE MARK OF  
ELASTIC STOP NUT CORPORATION OF AMERICA

## ELASTIC STOP NUTS

*Lock fast to make things last*

UNION, NEW JERSEY AND LINCOLN, NEBRASKA



# Life May Never Be the Same

By DONN LAYNE

**T**HE VETERAN of World War I kicked his uniform under the bed and posed before the mirror to admire the figure he cut in his new civilian clothes. He cocked his head at a jaunty angle and almost choked to death. To his neck, accustomed to the resilience of O. D. flannel, the starched collar which was then the civilian vogue was a garrote, only slower.

Out of his determination to have none of it, a new style was born. Shirt and collar makers, haberdashers and tradition bowed to his demand for soft collars.

Today we are engaged in another war which is changing the habits not only of 10,000,000 fighting men but of civilians as well. Patriotism, rationing, shortages have driven many people to do many things.

Some things that seemed originally hateful have unexpectedly turned out to be pleasant. Whether these war-born behavior patterns will continue into peace is a question to which men who study such things would like to know the answer.

Certainly there will be monstrous postwar markets—but where and for what?

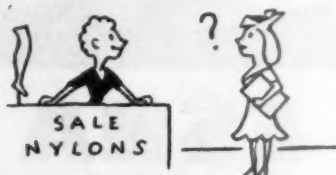
Consider:

## CLUB



## Coats

Officers and men of the U. S. Army have discovered the joys of coatless summers. Restaurants, theaters, night clubs, where shirtsleeves were once anathema, have perforce bowed to the custom. Come peace, will men who once would have bathed in public as willingly as appear coatless, continue to appear in shirtsleeves? Will headwaiters, now the convention is shattered, continue to admit the informal applicant?



## Stockings

Others are wondering about the girls who once wore stockings as sheer as possible to give the effect of bare legs

**WAR** uproots individuals, families, and whole communities, brings new ways of living in its wake. Will these war-born habits stick with us when peace comes?

and now wear leg make-up to give the effect of having stockings. Will they stick to make-up? Makers of stockings, garters, garter belts are interested.



## Shoes

Rationing has made everyone think twice before parting with a stamp. The cost of a pair of shoes has ceased to be the primary consideration; customers want the best value possible for each shoe stamp surrendered. Hence, the demand for better grade footwear has increased, and cobblers are busy repairing footwear that once would have been thrown away.

Rationing has also led to the discovery that cloth-tops, rope soles and other substitutes for sport and leisure wear can be attractive, comfortable and long-wearing.

After the war, will the demand for lower grade shoes start up again? Will the cobbler's business continue to boom? Will leather sport shoes replace canvas in spite of the fact that substitute footwear will be, of necessity, much cheaper than now? If you have an answer, many people will listen.



## Bonded Stuff?

When the need for explosives cut down the supply of bottled-in-bond rye and bourbon many of the thirsty discovered that rum, brandy, blended spirits or wine could be an enjoyable tippie.

It is entirely possible that the high prewar prestige of bonded liquor may have become shattered. And while we are talking about grain and fruit products, how about—



## Home Gardens

Will our millions of victory gardeners continue to raise their own vegetables and fruits once food becomes more plentiful and OPA a memory?

No small percentage of 19,000,000 V.G.'ers hold to the opinion that they are going to keep right on swinging a hoe—for exercise if nothing else.

They claim it's just as much fun as swinging a golf club. Cheaper, too.

What effect will such a decision have upon country club membership? Upon fresh and processed food demands? Upon the sales of home quick-freeze units?

And now that we have entered the home, how about—



## Kitchens

Two years ago many women of necessity became acquainted with kitchens that previously had long been the private domain of the family cook. Some few housewives found they liked the environment and took pride in their ability to whip up a tasty meal out of whatever their ration points allowed and the grocer had in stock.

Probably the problem of whether the missus wants her back has not yet penetrated the cook's welding mask. But those pondering postwar employment are thinking about it.

## Marketing

Curtailed retail deliveries, coupled with gasoline rationing, have changed buying habits of wives who used to hop into the car and drive to the store for a loaf of bread. Now, when a forgotten

# IT'S BEEN *WORKING* ON THE RAILROAD!



THIS IS A TIME OF YEAR when railroad executives deal with the problems that old man Winter will bring to their desks.

And you may be sure Winter's frozen fingers will not get their grip on your safety . . . your comfort . . . when you travel. The telegraph poles will continue to flash by your window as smoothly as on any rare day in June.

But the details involving your protection and comfort are legion. Small wonder then . . . the work of these men is never done.

When the frost sets in, for instance, strange things can happen along the right-of-way. In some areas, drainage water in the sub-surface soil freezes . . . causing the earth and tracks above to heave.

But in combating this menace to safety and speed . . . track maintenance crews have an ally in one of man's oldest servants . . . salt!

For it's a simple fact when Sterling Rock Salt is added to

water . . . the temperature at which water will freeze is substantially lowered. Thus by treating with salt such sub-surface areas as are prone to freeze . . . track heaves are eliminated!

Rock Salt is also used to keep switches from freezing. And again, when another spring has rolled around, salt serves to kill weeds that would sprout along the right-of-way.

Yet the high value railroad men place on salt only confirms the judgment of industry at large. To the majority of America's industrial leaders *International* is "Salt Headquarters." There are two reasons for this. First, the quality of Sterling Salt itself. Second, the unique salt processes developed exclusively by International. These improve production. They save man-hours and money.

International Salt Company, Inc., Scranton, Pa. and New York, N. Y.—Sterling Salt for every use—in industry, agriculture, the home.

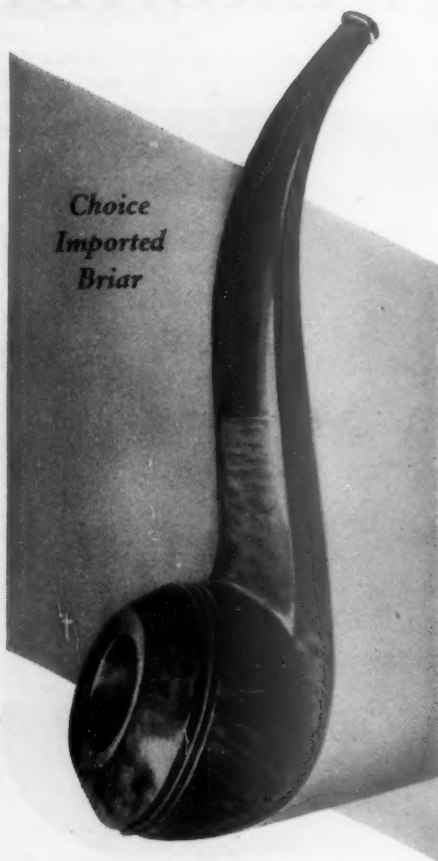




# Emperor

the pipe that  
grows more priceless

Choice  
Imported  
Briar



Today after two and one half years of war, there still exists a rare vintage collection of imported briar from which to carve a limited number of Emperors.

Nature took centuries to perfect these treasured burls. Skilled craftsmen who sculpture each Emperor know this—striving to reveal all the unique beauty with which Nature endowed the costly briar.

For symmetry, for rugged strength, for beauty of grain, here is true perfection.

Shop for yours leisurely. Purchase it proudly. It will grow even more priceless down through the years.

\$3.50 \$5.00 \$7.50

## EMPEROR PIPES

Empire Briar Pipe Co., Inc.  
Eighty York Street, Brooklyn 1, N. Y.

item on the shopping list can be a small domestic tragedy, women give more thought to shopping—and make fewer trips. They have learned to buy for three days or a week at one trip.

If this habit lasts food merchants may need to redesign their services, home refrigerators will have to be bigger.



### Campfires?

Will the memory of army life create a desire among veterans to go camping now and then? To head for the woods, the mountains, the streams and lakes; to rest before a fire, to enjoy the delicious smell of boiling coffee and frying bacon in the cool morning air—will they want to do more of this than ever before?

If so, it will mean a tremendous demand for fishing tackle, camping equipment, tourist cabins. And speaking of outdoor life, how about—

### Gun Clubs

The last war brought a sudden increase in rifle, pistol and skeet club

memberships. It was largely masculine with the emphasis on marksmanship rather than comfort. But this war has brought women into military service and into service as guards for military plants. Many have become acquainted with firearms for the first time.

If their interest continues to the point of gun club membership it may mean complete refurbishing of plant making the gun club perhaps more like the golf club, which it will rival.



### Cleanliness

Doubtful dry cleaning and laundry service has frequently driven the well-dressed man to let the force of gravity take the wrinkles out of his suits, and to wear his shirt two days instead of one when he thought he could get away with it. He has found that, if he let a suit hang in the closet for a couple of days after wearing it once or twice, enough wrinkles would disappear to make it presentable for another day or two. He has found, too, that elbow grease and a home



## Glass Becomes a Salesman

Glass makers foresee postwar stores that are nearly all glass, judging by advance literature. Not just windows, but walls, tables, shelves, insulation and other features are to be of glass—transparent, translucent, or colored.

The stores of the Giant Food Shopping

Centers in Washington have adopted simple glass mirrors shown above as a sales stimulant. The mirrors brighten the shop, create an atmosphere of cheerfulness. Maybe it is labor-saving, too, since the customer can look at two sides of a vegetable before she picks it up.

cleaner will cure the not-too-stubborn spot.



### And Postwar Driving?

Prior to the rubber and tire shortage, many car owners bought new tires all around after they had run from 18,000 to 22,000 miles on their original set. They never thought of having their tires recapped—not even the spare. Forced to drive on re-treads, they have now discovered that retreaded tires are satisfactory.

Does this have a meaning for tire builders? Some drivers say it has.



### Heating

When grandpa sat before an open fire and listened to the blizzard and the wolves howling duets outside, he put on his woolly underwear and his lounging clothing was heavy. The open fire and the wolves are gone, but fuel rationing has brought indoor winter temperatures down to about grandpa's level. Many persons have been following his custom during the war.

Some have found that cooler homes meant fewer colds; some found that they liked them cooler. Habits, again—and some of them may stick.

### Traveling

Millions of citizens, in uniform and out, have done more traveling in the past few years than ever before. They have traveled farther, more often and, after an experience or two with heavy bags and non-existent redcaps, lighter.

Has a new habit of travel been born? And has the taste for luggage changed?



### Thrift

Last but not least, many individuals who never saved before in their lives have formed thrift habits through war bond campaigns. Later they will have this money to spend, supporting whatever habits the war has left with them. Saving may be one of those habits.

## PRODUCTS FOR PEACE

.... PRODUCTION FOR VICTORY



## *Breeze Production* holds a Post-War Promise

Today as our armed forces smash forward to secure their beachheads on the Invasion Coast, Breeze Flexible Shielding Conduit by the mile and Breeze Multiple Electrical Connectors by the thousands are but two of the many items of Breeze manufacture that are helping make Victory possible. Communications and transportation for our fighting units on land, sea, and in the air are aided every minute of every hour by the dependable performance of such vital Breeze products as Radio Ignition Shielding, Aircraft Armor Plate, Flexible Shaft and Case Assemblies, Tab Controls and Actuators and Cartridge-type Engine Starters.

Tomorrow the same production lines that were able to turn out these items in such vast quantities, and the same hands whose skill and experience engineered them, will be available to manufacture the goods of

peace. And the Breeze Mark which has become an outstanding symbol of dependability to our fighting men on world-wide battlefronts will continue to be a mark of quality on products of the future.



### A Few of the Many Breeze Products in the Nation's Service

Radio Ignition and Auxiliary Shielding • Multiple Circuit Electrical Connectors • Flexible Shielding Conduit and Fittings • Cartridge Engine Starters • Internal Tie Rods • Elevator and Rudder Tab Controls • Flexible Shaft and Case Assemblies • Aircraft Armor Plate

**Breeze** **BREEZE MARK**

CORPORATIONS, INC. NEWARK, N. J.





U. S. ARMY PHOTO

A bathing beach has been set aside—and civilians are not encouraged to intrude

# Fighters—with Time to Think

By JOHN CARLYLE

"I'LL PUT it up to you," said the combat pilot. "What would you think if you were in my place?"

He had flown 30 missions over Germany. Blasted a whole row of German cities—Schweinfurt, Berlin, Munich—ripped through flak thick enough to cut with a knife. Came home without a scratch. But he was beginning to show signs of occupational fatigue. Nervously overtired. The flyers all get it sooner or later. Then they are sent home to the Army Air Force's fine, human, intelligent Redistribution Stations, which are a part of the AAF's newly activated Personnel Distribution Command, for rest and relaxation.

After a few weeks at Atlantic City or Miami, or Santa Monica, Cal., most of them are good as new. They go back to flying. Some are assigned as instructors.

Only a few are grounded.

"I had a good job when I went to war. One of the top spots in a radio factory here in Jersey. My wife had never worked before we were married. We had a nice little flat. Not big, you know, but nice."

**AIRMEN, home to rest and relax, want to get the war ended, want to know what it's all about and, above all, want the certainty of jobs later**

The radio factory wants to get him out of the Air Force. It has offered him a better job than he ever had, with a certainty of rapid promotion and future security. The pilot said he didn't want to brag, but the factory thinks he is good. He could get a release from the AAF as a key man, but he will not ask for it. The way he looks at it, the war must be finished before he can go back to work with a clean heart.

"But, look, when the war is over. The factory will be cutting down its force. Instead of being a key man with a certainty of holding my job I'll be just another guy looking for one. Don't get me wrong. I'm in the war for the duration. But what would you be thinking if you were in my place?"

His wife is working now:

"So I can send him some little com-

forts now and then. But I'm not able to put away much money, in case he shouldn't find a job after the war."

Many of these "returnees"—Air Force for returned flyers—are confused in their thinking. Some of them ask:

"What's it all about? How did we get into this? What are we fighting for?"

These questions can be answered satisfactorily and are being answered at the Redistribution Stations. The men are not being dosed with inspiring talk. They are too hard for that. But they are being shown the facts.

They are not confused about one thing:

They all want the certainty of jobs when the fighting ends.

Not doles. Not philanthropy. Twenty dollars a week for a year and then apples won't do. They do not even ask security. Given a chance at jobs, they believe they are good enough to hold them or get better ones.

But they feel they have a right to as good a future as they would have had if they had not gone to war. They do not



*This Seals the Air!*

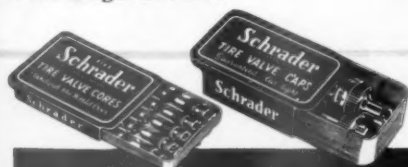
*OR-*

**THIS?**

All Standard Schrader Valve Caps contain this specially designed sealing unit with a dome-shaped rubber washer vulcanized between two dome-shaped BRASS plates. Because of their unique construction, these caps are guaranteed airtight up to 250 lbs. pressure. This mighty midget does the work.

### MR. & MRS. AMERICA

Today your tires may seem good for many more miles—but don't let underinflation ruin them; check them now. Inflate if necessary. And be sure a Schrader Valve Cap is on every tire including the spare—screwed down fingertight. It's mighty cheap insurance for longer tire life.



**Schrader**  
REG. U.S. PAT. OFF.  
CONTROLS THE AIR

YOU wouldn't use a camel if your tires gave out? Maybe not—but you'll wish you had one if you cannot get the new tires you need. It will be some time before there will be enough tires to supply everyone. So save your present ones by keeping them properly inflated.

What's so important about correct inflation? Just this. A popular sized tire *underinflated only 6 pounds*, loses 30% of its potential mileage.

Protection against underinflation is easy. Check pressure regularly. Put air in tires when needed, and seal that air in. That's important. SEAL that air in. The Schrader Valve Cap does it. Applied firmly, these caps provide an airtight seal up to 250 pounds pressure—more than you'll ever need. So when you inflate tires, be sure a Schrader Cap is on every valve, including the spare.

Schrader Caps are available in the familiar red, white and blue package wherever gas or tires are sold—or tires are serviced.

**NEXT TIME YOU GET GAS**

**Get Air-Get AIRTIGHT CAPS**  
**SOLD EVERYWHERE**



think this is selfish or unpatriotic. They think it is good American independence. Just as today's maker of shells looks forward to making refrigerators when peace comes, or the union leader to holding on to union maintenance. In short they say they're human, too.

If they don't get jobs they'll want to know why not.

### Don't resent workers at home

THESE kids—again that's the Army name for them, they look to run between 20 and 28 years old—don't grouch about the men who stayed at home and pulled down big money for short hours of work and slept in clean beds. Not if they worked. They are savage about the men who did not work and let down the men who fought. But if, when they come home, the man on the job holds on to the job and the man who fought comes back to find factory gates barred against him, there will be some kind of a readjustment.

Remember that, for the most part, these "kids" grew up cynical and disillusioned. They have heard their fathers and uncles tell the story of the War to End Wars. That's always good for a laugh. They are not the gay young adventurers who went to the First War. Some of us still remember the happy, grinning, excited faces in the windows of the troop trains 26 years ago. The

men who go to war now go in a different spirit. And these kids at the Redistribution Stations are all leadership material.

Men who live in the close walls of a bomber forget whatever social distinction there may be in rank. It's "Jim" and "Bill." One returned pilot made 50 wholly successful missions. His plane was sieved from time to time but not a man was hurt. He was sent home for a rest:

"I got to worrying about the men in my crew. Nine of the finest men—the finest men. I couldn't sleep nights."

There is not a hint of disloyalty in these men. There could not be. They are the cream of the American crop. It is positively startling to realize what a good looking lot they are. Fast-stepping, erect, clear-eyed, straight-backed.

The handsomest youngster of them all might have been 24. He spent four days in a rubber boat within sight of a Japanese island:

"I was going to knock myself off if they came for me but they didn't sight me."

He expects to go back to the war. All of them do. Some want a change of scene, swapping England for New Guinea, for instance, but those who fear that they may be detailed as instructors or grounded permanently because their flying nerves are shot are miserable.

Not that they are happy at the thought of going back to combat.

They say that any one who pretends to be happy must be either loopy or a liar. They tell grim little jokes, such as the story of the pilot—good, with a good record—who slept in one of the Nissen huts of corrugated iron. When he was asleep, his humor-loving mates would run sticks along the corrugations outside, producing a noise not unlike machine gun racket. The pilot would throw off his blankets, scream and dash for the open air.

Next day he'd be fighting again. He had not lost his courage, but his nerves were going.

"It was funny as hell."

### Want homes and jobs

BUT these men want to see the war ended as soon as possible so they can get back to their homes.

And jobs!

This is a serious matter. The returnees do not talk fluently. They do not talk at all until some common ground has been established. There is no soapbox oratory. They do not clot together to discuss the present and the future. They are not sad or shaken or mournful. They answer direct questions briefly, courteously, in a detached fashion unless the questioner has been able to establish a friendly rating. They laugh freely, they have a swell time at the seashore, and they spend their money like other youngsters.



These men have seen plenty of fighting and are now at play, getting in shape to go back. They won't quit till victory, but are wondering how we got into this war and what tomorrow will bring

**THIS ADVERTISEMENT IS ADDRESSED  
TO FIVE CONCERNS  
EACH NEEDING \$500,000-TOMORROW!**

**T**HIS is probably the most forthright advertisement ever published by a conservative financial House. And advisedly so.

The tempo of the day and the temper of industry's needs, under the lash of war, call for unvarnished words and shirt-sleeve facts.

Accordingly, we say that you can have our check for \$500,000\*...*more*, if you need more...less, if less is called for; on a basis that will *solve* rather than *involve* your problems. And you can have it in an incredibly short time—if there is a reasonable relationship between your worth and the amount of money required. And provided we can help you make money with reasonable safety to ourselves.

Whether you want to use this money to pay heavy taxes, purchase needed equip-

ment, buy out a partner, handle more business with your present capital...or for any other vitally important purpose...you will be free to follow through with your plans without the need for repaying this money at the expense of your operation.

Under our plan of financing, current ratios are not the controlling factor. The cash you get from us, under ordinary conditions, will be at your disposal indefinitely. In effect, it serves as capital money.

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on their vacations. But underneath they are hard:

"It does something to you when guys are trying to kill you every day."

"Ever think of the civilians killed on your bombing raids?"

"No. Never. We go out there to hit a target and it's swell when you see her come up *whoosh* in a gust of smoke and it's tough when you miss and have to haul out of there just as though you'd never got out of bed that day. But I never heard anyone speak of the civilians."

In every other army the high command regards men as so many hunks of flesh. If our side loses fewer hunks in a battle than the other side then our side wins. The Germans call their men "cannon fodder." Wounded men who cannot be reclaimed are just nuisances to the Germans. Even the French, who are a civilized people, did not bother too much about what were called "shell-shock" cases in the First War. The theory was that, if the shell-shocked man was forced back into line, he would probably recover. The Japanese have always wasted their men with unbelievable savagery. Americans save their men to the fullest



U. S. ARMY PHOTO

For lonesome airmen, timorous and single, there's even a date bureau

extent consistent with putting over the fighting punch.

The primary idea back of the Army Air Force's creation of the Redistribution Stations was undoubtedly to salvage the men before they go to waste. It costs \$25,000 to train a combat pilot. Nine other men ride with him in a bomber. Their education was expensive. The men are hard to replace, because they're good to begin with. The plane might cost from a quarter of a million dollars up. If the outfit is washed out at one moment the loss might be charged to war

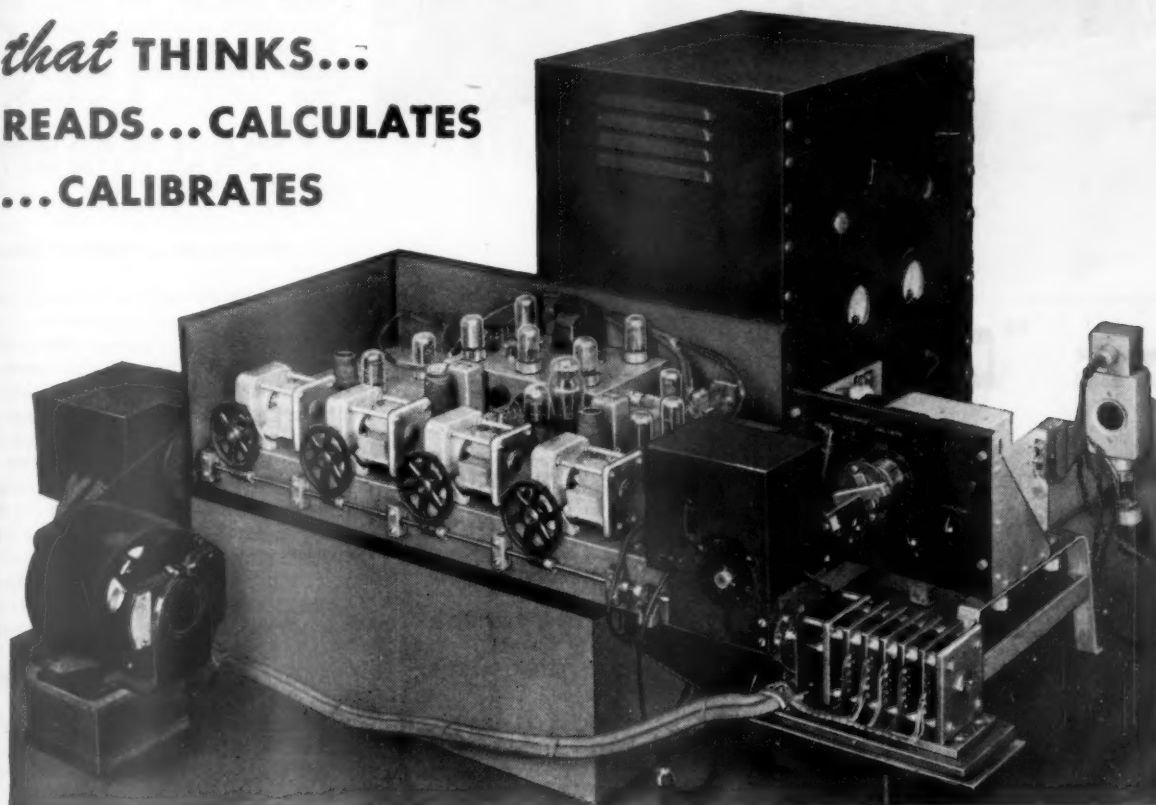
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## CORPORATION





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Many of these little "city hicks" have never seen a farm . . . never ridden on a load of fresh-mown hay. It's not much fun to travel now. But tomorrow they'll zip down to Uncle Bill's farm . . . any time . . . in sleek, new, even more comfortably appointed post-war Rock Island ROCKETS!

Today's children will bask in a brighter, more beautiful America . . . tomorrow . . . when our nation, the war won, resumes its march of progress in the building of the peace.

Buy your coal this month



TOMORROW—EVEN FINER TRANSPORTATION

# ROCK ISLAND LINES

BUY MORE WAR BONDS

hazard. At another time the loss of a plane might conceivably break up a battle plan. That is an exaggerated simile, of course, but there's the idea.

If the pilot suffers from occupational fatigue—slow reactions, jumpy nerves, uncertain judgment, doubt of his plane, his men, his motor, any one of a dozen forms—a loss is to be feared. Anticipated, perhaps. One man has flown 200 times over Germany and is as fresh as paint. There is no accounting for that.

The men are sent home for a rest while they are still excellent to very good. There is no fixed rule. In some areas men are sent home when they have flown a certain number of mission hours. In others a count of missions is made. Twenty will send a man home from one area; in others 50 are required.

It was found that it is not enough to give a man rest and fun and full feeding. Many factors must be considered.

### Home may shake him up

SOMETIMES going home is ruinous.

The youngster breezes in, throws his cap at the cat, kisses his mother and beats the old man on the back. Full of ginger. Mother breaks down. It has been hard on her, she says, and on Papa too. She wants to know about the kid's exploits and if he tells her she cries. If he does not tell her she cries. She is afraid he will never again be her little boy, and in that she is superbly right. She thinks it isn't fair:

"You've done enough for them. They ought to let you come home."

Maybe the best girl has changed toward him. She may have fallen in love with other territory. Perhaps she has married.

The people Mother brings in to meet him have suddenly become a strange breed of cats. They bore him and they look on him strangely. A few days of that shakes him.

Some men come back expecting to be looked on as heroes. They are heroes, but the word has any meaning at all. But the neighbors may have forgotten them, or are thinking of other things. The neighbors are not unappreciative. Just self-interested. One man went back to his home:

"They acted as though they thought I'd stand on a corner and bang at 'em with a .45."

The men who are sent to the three Redistribution Stations are sound physically. They are met when they land by sergeants with blank forms who want to know all the usual things. Each man is ticketed for the station nearest his home and, after he has spent three weeks with the folks, he appears at the Station and enters upon the life of a high-flying Riley.

If he is an officer in Atlantic City he is sent to the Ritz. This was once what was called an exclusive hotel, by which is meant that everything cost plenty. There were "genuine oil paintings" on the lobby walls, a revolving bar joined its advantages to whisky sours for

those who Persian every ro these th tion. Eve officer e pay each bill he n

If he v made w and ap in Atlan city in writer o other ho Ritz, pai two glas gave a c that, un BUSINES appeared

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those who like to get pickled that way. Persian rugs were on the floors and every room had a private bath. Some of these things are still there in moderation. Everything is on the house for the officer except for the 25 cents he must pay each day for his room and the mess bill he must pay wherever he is.

If he wants his wife to join him, she is made welcome at a room cost of \$1.50 and approximately \$1.25 for food. This in Atlantic City, mind you, in the same city in which at the same time the writer of these lines quartered in another hotel of class comparable to the Ritz, paid 50 cents for a bowl of ice and two glasses delivered at his room, and gave a quarter as a tip because he felt that, under the circumstances, NATION'S BUSINESS would be disappointed if he appeared to be cheap.

The meals for the returnees are out of the Army world. An appetizer, a huge main dish, always good, a dessert and coffee for lunch. A relish, iced consommé, luscious fried chicken and ice cream made with real cream and chocolate and plenty of coffee is a sample dinner.

A bathing beach is set aside for officers on which civilians intrude at plenty of peril to themselves. All sorts of fun, sports, boxing matches, concerts and no formations. Or only such formations as are necessary to get a certain number of officers to a certain place at a definite time. No lining up and toing out and counting off or standing at attention.

Nothing but rest and relaxation and talk. A swell time.

Exception to the above will be noted later.

### Enlisted man's heaven

PERHAPS the enlisted man gets a shade the best of it. He pays not a penny. For instance, a milk bar offers him milk, until he burps at the sight, with free cookies. He has a Noncommissioned Officers club, which was formerly the night club of the Hotel Ambassador where he is quartered. He not only does not pay for his room but a chambermaid makes up his bed each morning. This fact sets the Redistribution Stations apart from all other military activities anywhere.

He has a bathing beach of his own, just like the officers, and a band concert each day which is more than they have. If the paymaster has not caught up with him recently he is issued a reasonable percentage of the pay coming to him, on his own valuation. The finest mail service in the country operates for him, once he has registered—get that? registered—at the hotel desk. One man's mail numbered 80 pieces.

Like the officers, he has golf, fishing, a swimming pool, movies, all sorts of indoor games, and swarms of his fellow flying men who want to play. He buys cigarettes, shave creams, candy and other whatnots at bargain prices. If his clothing has been lost, he gets replacements. A dental department store—it's more than an office—works two shifts

**"I'VE GOT  
THE BIGGEST JOB  
IN THE OFFICE!"**



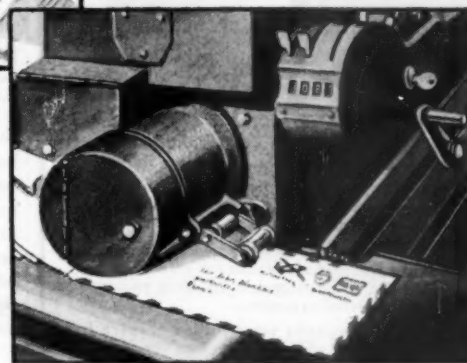
### "... and What Do I Get? ▸

Squawks that split your eardrums! In the morning I open a million letters by hand and the boys are mad if they don't get their mail in nothing flat. They must think I've got a hundred hands."



### ◀ "In the Afternoon

I do the same thing all over again besides taking care of the outgoing mail. And is that a honey of a job in this outfit! It all comes through in the last half hour and there isn't an automatic machine in the joint! Sealing, weighing, stamping—everything done by hand. I'm disgusted."



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daily. There is nothing dental that cannot and will not be done there. If the GI's promotion has been delayed, the Personnel Department gets busy in every known way. Short-circuited decorations are found and pinned on.

Of course, there are physicals for officers and men.

The Air Force likes to keep posted. It not only ultimately assembles all the facts which will indicate that the man is fit to be sent back to combat, or will be more useful as an instructor who has been case-hardened in battle, or perhaps must be assigned to ground duty, at least for a time.

His past is inquired into—especially the past of the enlisted man—in an effort to avoid fitting round pegs into square holes.

### Dates for bashful bachelors

ADD up what has been said and the total shows that the returnees are well fed, relaxed, lodged and entertained. There is even a date bureau, where the timorous airman—assuming there is such a thing—can get in official and irreproachable touch with a blonde, five feet, four, 120, fond of music and dancing.

The men respond quickly enough to the physical stimulus of food and frolic. But the experienced elder officers in the AAF saw that something more was needed. The men were grim. They wanted to know what was ahead of them after the war. If the world, and more specifically the United States, is not to be better as a result of the war, then what was the use of fighting?

"How about our jobs after the war?"

A natural reaction. Some of those who have watched operations at the Redistribution Stations think that industry might benefit by studying what has been learned and what has been done in the effort to solve problems in relation to the soldier when he again becomes a civilian.

It is not, nor can it be, the duty of the Personnel Redistribution Command to see that these men are properly placed in civilian jobs at the war's end. This should be made emphatically clear. Its work is reconditioning, examining, evaluating and assigning returned combat personnel to jobs within the continental U. S. air forces and commands. But when the returnee—worried about what may happen to him at the war's end—says:

"If we don't get jobs there'll be hell to pay—" an effort was made to show him precisely what is the situation. Not by propaganda. Only by facts. The toughest kind of facts. They can take it. As an entirely experimental measure, several leaders of industry were asked to talk to the men. This was no part of the activities of the Redistribution Command, but it was such a definite success that plans are being made to set up a weekly series of talks, possibly by economists and others from universities so that all returnees can hear impersonal and factual information about the

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**MARSH**

American economy, what we have accomplished in production, and other matters of interest to men who may have been away from the country during a period of tremendous accomplishment.

The auditorium of the great convention hall in Atlantic City is almost big enough for a battalion drill. The men filed in, silent, sat down and listened. Then they popped questions.

"Tough questions?"

"Tough? Oh, my God!"

One man talked for ten minutes to those hard faces and broke down. He could not keep on with his prepared speech and he wiped his forehead and said so:

"Ask me what you want to know."

They fired at him from every angle. When he got away from his eloquence and got down to hard pan he did well. In this experimental series no continuity or balance was achieved, but it proved to be enlightening and helpful to all.

## Disapprove of strikes

THE men hate the goings-on of organized labor as they see them. A slackening in the production line may mean death—a painful, personal, possibly avoidable death—to each of them. Philip Murray of the CIO talked to them. He made a good, professional labor leader talk. When the time came, this question was fired at him from all over the hall:

"How about strikes?"

"Sure, there were strikes. There'll be more of them. This is a free country. How'd you like to live in a country where you didn't dare strike?"

Murray got a big hand when he left. Whether he had convinced his audience or not, the men liked his courage.

Every phase of our complicated home situation has been discussed, at one time or another. Taxes, free enterprise, government interference, bureaucracy, lend-lease, postwar power politics. The speakers talk to the airmen as they would to equals. Every flier here is a volunteer. Every one has won his place by courage, intelligence and stamina. The man who can't take it washes out:

"I had two grand men sent me. They knew their business. But the very day they reached camp I had to order them out on the field to take care of a plane that was coming in, shot to bits. When we reached it the C.O. spoke to them:

"Reach in there and pull out those two men."

"They took 'em out in pieces. A leg here and an arm there. My men did the job, but when we got back to the hut they came to me.

"Sorry," they said. "But we can't take it. We're through. Send us anywhere you want to, but we'll never fly."

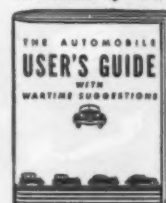
It is the men who can take it and stay who make up the audiences at the Redistribution Stations. Never better men anywhere in this world. But they want to know the answer and as yet they have not been given the answer. What jobs will they get and where, and never mind the baloney.

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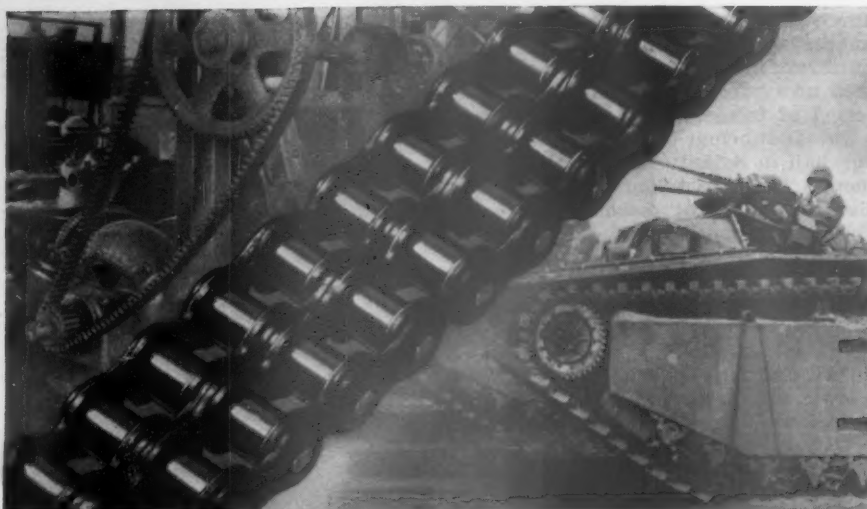
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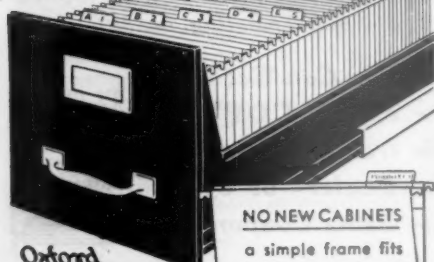
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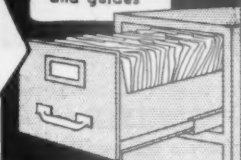
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## When Lend-Lease Is Demobilized

(Continued from page 23)

exploded and are gone; the food has been eaten; the itemized services represent a possible recoverable item for postwar adjustment; and some of the raw materials and industrial equipment still are on hand in every country.

Merchant ships transferred to other nations are merely under operations contract, with title remaining in the U. S. Government. This is true also of some aircraft allocations. But airports and other engineering installations abroad present a different problem. Over the whole face of the world are railroads, terminals, trucking routes, air lines, docks and wharves—built by lend-lease or with lend-lease assistance. Are such projects to be written off with no attempt at adjustment or settlement?

### Lend-lease takes much food

FOOD always has been a difficult problem in lend-lease, principally because regional shortages on the home front gave the overseas shipments a psychological importance far out of line with the actual tonnage. Special food demands from lend-lease nations to accommodate cherished national customs likewise became an occasional source of domestic irritation.

Lend-lease food shipments for the first six months of 1944 averaged about 800,000,000 pounds a month, or approximately enough to sustain a population of 9,000,000 persons at the average American dietary standard of three pounds a day. (The British Empire got 58 per cent, Russia 32 per cent, and all other nations ten per cent.) Some of the principal items for the six months:

Butter .....	22,600,000 pounds
Cheese .....	110,409,744 "
Eggs .....	119,352,707 "
Milk .....	295,000,000 "
Meat and fats .....	1,491,235,394 "
Fruit and Vegetables .....	440,562,755 "
Cereal products .....	899,622,693 "
Sugar .....	447,324,231 "

When the 1944 lend-lease appropriation was before the House Committee last May, Chairman Clarence Cannon, of Missouri, asked why so much of the sugar allocation for Russia was in the form of cubes, rather than in less costly bulk. Lt. Col. R. W. Olmstead, Deputy Director of Supply in WFA, explained:

"It seems that the Russian army for many, many years has had the habit in the wintertime of stopping about once an hour or so and drinking a cup of boiling hot tea. The way they drink it is to put a cube of sugar between their teeth and suck the tea through it. And because we have been advised that it has a little bit to do with the way the army moves around in the wintertime, we have gone ahead and gotten cube sugar for them."

Comparable incidents of special catering to national tastes and habits are recorded in the hearings covering lend-lease food shipments to Greece, French Africa, Egypt, Rhodesia and New Zealand.

A postwar surplus of some 50,000 airplanes, many of them already overseas, is another particular problem of lend-lease demobilization. Included in this surplus will be approximately 16,000 planes of the transport type (now bombers), which may be adapted readily to commercial service. Before the war all the air lines in the world had fewer than 2,000 such planes in service.

From the standpoint of both advancing technology and postwar adjustment of the aircraft industry, it probably would be helpful if these surplus planes could be salvaged for scrap. It may be noted, however, that the master lend-lease agreements provide uniformly that any equipment on hand overseas, not consumed or destroyed, reverts automatically at the end of the war to U.S. ownership.

The suggestion has been put forward in Washington that all lend-lease accounts should be frozen quickly after the war by the signing of notes representing the final balance of allocations to each nation (minus reverse lend-lease items); and that these notes then be made the basis of future international settlements on other war items.

This suggestion is well received in some official quarters, but there are certain diplomatic obstacles inherent in master lend-lease agreements signed with the various recipient nations. The Russian agreement, for example, provides specifically that, "the terms and conditions of the final determination between Washington and Moscow shall be such as not to burden commerce between the two countries."

These terms limit sharply the scope of final lend-lease settlements.

The terms of the master lend-lease agreement with Great Britain are similar to those quoted from the Russian convention. Between them, these two agreements cover approximately 75 percent of all lend-lease accounts. The final determinations made on these two accounts doubtless will go far toward determining the scope and terms of our postwar foreign trade for a decade.

Two guiding policies appear to be emerging in Washington discussions of these forthcoming settlements:

**First**, there is a determination to do nothing which might curtail postwar employment at home, as would be the case were mountains of surplus materials carried back from Europe and Africa.

**Second**, the belief is growing that any materials left abroad will stand as good "salesmen" for American products in the future, and that the introduction of many American articles abroad through lend-lease account may repay the U.S. many times in future trade.

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## New Weapons in War on FIRE!

(Continued from page 24)

with hoses equipped with fog nozzles. An electrical fire—and they are going to use water? They are! Watch them.

### Fog smothers fires

THE fog nozzles go on, and a roaring ball of water fog begins to descend on the switch box and transformer. It is made by the dozens of needle-fine streams rushing from the hose tip at 100 miles an hour. These streams strike against one another just outside. Backed by 150 pounds of pressure, each pair of streams breaks up every gallon of water—of which 60 may go through in a minute—into 23,000,000 non-conducting particles.

No one is electrocuted! The men stand ten feet away from the transformer and play the water fog on it with impunity. In a matter of seconds the fire is out.

The fog does its work by cooling and smothering. The fire's heat turns the fog into steam and thousands of BTU's of

heat energy are absorbed. The flames are cooled to below the ignition point of the burning material. Then the steam chokes off the fire's oxygen supply, and, pronto!—the fire is smothered, out.

For another advantage of water fog, recall for a moment the *Normandie*. Remember how the big hose streams put so much water into her she turned over? Compare this with the more modern fire-fighting treatment applied to the transport *Wakefield*. She was the former liner *Manhattan*, and one day some months ago caught fire off Labrador. But, instead of tons of water, firemen filled her holds for three days with a constant fog. When the fire ended, the ship had a list of only six per cent. Another reason our Navy is now equipping the whole fleet to fight fire with fog!

The Navy also uses foam in a big way. In one series of Pacific sea fights, 118 warship fires were reported snuffed out by foam. In the Marshall Island raid a Jap bomb struck the carrier *Enterprise*, firing her flight and hangar decks



FEDERAL SHIPBUILDING AND DRY DOCK CO.

Inspection counts. To keep losses down, make sure your fire-fighting equipment works—and that your employees know how to use it



Two of the famed Rock Island "Rockets" in La Salle Street Station, Chicago

## *Trains for the Modern World*

From the heart of Chicago, the Rock Island Lines fan out to serve important cities of the Mississippi Valley, the Plains states and on to the Pacific Coast. Typical of their modern service is the Peoria Rocket, a Budd-built stainless steel streamliner which flashes over the 161 miles between Chicago and Peoria four times a day, seven

days a week. Since 1938, this one train has made more than 9000 trips and has carried well over a million passengers.

Similar Rocket service links Chicago and Des Moines, Kansas City and Minneapolis, and scores of other fortunate cities on this progressive railway system.

Budd-built trains are constructed of stainless steel, the strongest and safest

material for car-building. Now represented on the foremost railroads in America, they will be seen in far greater numbers in post-war years, bringing still more advanced ideas of comfort, luxury and convenience for the traveling public. Budd builds for the future.

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REG. U. S. PAT. OFF.





# TIMBER COVERS MORE THAN HALF OF TENNESSEE

*An Important Message  
to Manufacturers*  
from PRENTICE COOPER  
GOVERNOR OF TENNESSEE

**W**ITH more than half of the entire area of Tennessee covered with both hard and soft woods, no state offers greater advantages for diversified wood industries.

This is particularly true in the rapidly developing field of resin-bonded plywoods. The chemicals necessary to the production of the synthetic bonding agents are available or can be manufactured from local mineral resources. Low-cost electricity for the induction-heating bonding process is abundant from the giant TVA hydroelectric system.

All types of manufacturers find many advantages to plant locations in Tennessee. Check list of basic advantages listed.

Manufacturers interested in meeting changing conditions, increasing population shifts, and postwar competition should investigate Tennessee now.

Write for specific information and surveys relating to your particular requirements. Ask for illustrated book: "Tennessee—Land of Industrial Advantages."

Governor's Industrial Council, Department of Conservation  
731 State Office Bldg. Nashville, (3) Tenn.

*Investigate* **TENNESSEE**  
THE FIRST PUBLIC POWER STATE

#### Basic Advantages To Plant Locations In Tennessee

- ★ An unsurpassed variety of major industrial minerals and agricultural products.
- ★ Huge coal reserves making possible economical steam-power generation.
- ★ An inexhaustible supply of industrially suitable water.
- ★ Inland waterway system of three great rivers for low-cost transportation to Midwest, Gulf, and World ports.
- ★ Central location permitting 24-hour delivery to more than 51% of the Nation's population.
- ★ Excellent railway, highway, and airline transportation.
- ★ Cooperative skilled and semi-skilled native-born labor.
- ★ Opportunity for low-cost assemblage of raw materials or manufactured parts.
- ★ Uncongested plant sites near basic materials, river and rail terminals.
- ★ Ideal living conditions for both employer and employee.
- ★ Sound State tax structure. No personal earnings or sales taxes.
- ★ State and municipal governments friendly to industry.

with blazing gasoline. The ship's new mechanical foam apparatus smothered the fire in one minute!

This foam is truly "mechanical." No chemical reaction whatever is involved. The foam is produced merely by beating up water with a given amount of foam-making liquid—the latter sometimes a soybean product, and sometimes ferric or aluminum sulphate. A specially designed foam nozzle does the work, sucking up the liquid through a pick-up tube from a portable container. Then it mixes it with water and air inside the nozzle.

Some of these nozzles can whip up 4,500 gallons of foam a minute and throw it 150 feet.

#### Foam chokes out fires

THE amazing stuff is both cohesive and adhesive. Wherever it strikes it sticks—even on vertical surfaces of glass! It will form a six- to eight-inch bubble blanket, so tough and gas-tight that, after it has extinguished, say, a vat of blazing naphtha, you can drag a lighted torch across the foam, and no re-ignition occurs.

Harmless to personnel and to clothing, the foam evaporates 90 per cent after a fire. Best of all, for war time and fires at sea, it works with either fresh water or salt. One reason the Navy has ordered 100,000 foam nozzles and 2,500,000 gallons of foam liquid from one manufacturer alone.

For land fire-fighting, there are now fire trucks devoted entirely to such foam. They carry powerful pumps, a 500-gallon tank of foam compound, and a telescoping foam tower. The latter puts out fires in house-high oil storage tanks. One or two men operating it, the tower will rear its nose over the tank edge, like an inquisitive dinosaur, and belch down the fire-quenching foam.

Another new fire-fighter which the war has brought along fast is carbon dioxide. This is, of course, the inert colorless gas which all living beings exhale and which in solid form is the white "dry ice" of commerce. When a liquid in cylinders under pressure, it discharges, on being released, in a cloud of unbelievably cold pellets of "snow."

Airplane crash fires have brought carbon dioxide very much to the fore as a modern fire-fighter because, when a plane crashes and bursts into flames, time is everything.

Inside the plane may be ten to 20 persons, trapped in the bashed-in fuselage. Two thousand or more gallons of high octane gas are stored all through the wings, so the fire feeds from everywhere. The heat is so intense that ordinary fire-fighting equipment and personnel frequently cannot get within 150 feet of the flames. If the plane is an Army bomber, the several thousand rounds of machine gun ammunition and target cannon shells are ready to go off at any second.

For such situations there is now a carbon dioxide fire-fighting wagon. It carries one big tank of liquid CO<sub>2</sub>, a two-

way radio, two carbon dioxide hose lines, discharge nozzles for "ground sweep" from the bumpers, and an overhead boom which can be raised, lowered and revolved from inside the cab. It spouts 2,100 pounds of carbon dioxide per minute in a blinding blizzard of "snow."

The cooling and extinguishing powers of this new piece of apparatus must be seen to be believed. Because of the 500-times expansion of the liquid into gas, the carbon dioxide roars out of the nozzles at 110 degrees below zero, and when it hits the flames. . . . But let someone who has ridden this wagon into the fiery furnace tell about it:

"I drove it," says the manager of one West Coast airport, "into a fire fed by 1,000 gallons of gasoline. The flames were shooting forty feet into the air. The minute the carbon dioxide boom nozzle was turned on, I not only felt no heat, but was actually cold, although I was in the middle of the blaze. In other fires, large and small, the nozzles have never been in use continuously more than 30 seconds!"

After it extinguishes, carbon dioxide snow evaporates and disappears. Textile mills and motion picture companies therefore use it in fixed installations, knowing it will not injure sensitive fabrics or films. Electrical equipment, like dynamos and transformers, can be smothered with it, in every gas-accessible nook and cranny, and can be immediately usable again.

It extinguishes, of course, by cooling, and by reducing the oxygen content of the air. Normal air has an oxygen content of 21 per cent. The CO<sub>2</sub> ordinarily has to reduce that to 16. At that point, although fire can no longer breathe, human beings can.

Powder is another up-to-the-minute extinguishing agent, which has done sensational "war work," particularly in certain kinds of industrial fires.

The powder, usually a specially



## BIGGER THINGS ARE COMING TO YOUR HOME TOWN

ENEMY GUNS will soon roll through the streets of the towns and villages of America . . .

But they will be headed toward the Village Green, as Trophies of War; as monuments dedicated to the part that brave men have played in the winning of the War.

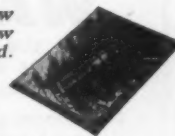
Let America never forget, as it strolls past these Trophies, why its brave men went away.

They went to protect America's traditional Rights of Man . . . the Privileges of Free Enterprise . . . Free Competition . . . Private Initiative and Freedom of Opportunity for Labor—to protect the Four Freedoms of our commercial life as well as the Four Freedoms of civil America.

And if the men who will have come home as conquerors return to any other conditions they will have lost the war . . . and the enemy gun, standing in your town square, become a symbol of the conquest of American liberty.

At the Detroit Tap & Tool Company we are all working for the day when a captured Nazi trophy will be placed in *your* home town. When this day comes our skill will join the skill and productive might of American industry to create a new era of enlightened living. Toward this goal let us all—business, labor, everybody—unite to hasten this happy day.

Send for your free copy of "Threads of Destiny," a new booklet tracing the development of the machine screw thread. Please make your request on your company letterhead.



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SALESMEN



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September, 1944

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*J. Barvet*  
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**BRANDY**  
OF CHARACTER

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PROOF

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Write New Products Division, Dept. NB9  
**THE MB MANUFACTURING CO., INC.**  
NEW HAVEN, CONN.

treated bicarbonate of soda, has its own specially designed apparatus. This is a dispenser, so called, developed by a Canadian paper company and two American manufacturers. This fire truck throws the "dry powder" over the flames through special hoses, nozzles, tanks and blowers. Against magnesium fires it particularly shines.

A spectacular demonstration of this occurred one day in August, 1943, in the Oak Island Yards of the Lehigh Valley Railroad in New Jersey. There was a train wreck. Four freight cars lay smashed open and on fire. Two were tankers full of oil. One was full of rubber tires. The fourth carried magnesium.

The local fire department turned high-pressure water streams on the burning magnesium, which caused it to explode and scatter over the tracks. Landing on thoroughly wetted ground, it burned even more intensely since water often aids magnesium in combustion.

After 32 hours the fire department admitted it couldn't get the fire under control.

A railroad truck then brought up 3,500 pounds of extinguishing powder which, applied to the burning magnesium, doused it completely. And magnesium, remember, burns at 2372 degrees Fahrenheit!

Usually, mention of these newest fire-fighting developments surprises the average citizen. He has not seen them at work, and he still thinks of fire-fighting in terms of the hook and ladder clanging 'round the corner and big hose streams smashing in second-story window panes.

But this fall he will have an opportunity to see the new materials and techniques in action. Fire departments

and industrial plants all over the country will be demonstrating them for him in a week especially set apart. That is, October 8 to 14, National Fire Prevention Week.

Fire Prevention Week each year climaxes the continuous year-round fire-safety program of the Inter-Chamber Fire Waste Contest sponsored by the National Fire Waste Council of the Chamber of Commerce of the United States. The participants are cities, nearly 600 of them (total population more than 40,000,000) and the contests year by year, since their inception in 1923, have been steadily helping cut down fire loss.

### Fire loss moving upward

THIS year, however, the Council will have to point out that the trend is upward again. Fire losses in 1942 were \$314,000,000. Last year: \$373,000,000. They passed \$213,000,000 in the first half of 1944.

At a time when every fire fights for the Axis!

So, although Americans will have a week in which they are shown how the newest in fire-fighting materials and techniques can perform, they will also be reminded that every year we are now giving 10,000 lives to the flames; and that annually 35,000 industrial war plant fires slow up our march to victory.

They will be told, repeatedly: "Think of the chances for fire! Remember that 500,000 matches are struck in this country every minute of every day! So guard against fire. Every good citizen must—especially in war time."



### Dry Water Tugs

Far from the oceans and on dry land Canadians are building salt water tugs for the Royal Navy.

They are moved by train from On-

tario to the Atlantic coast for shipment overseas. Both steel and wooden tugs are being constructed to haul supply barges feeding the invasion armies.

## Presentees:



ONE company fights absenteeism by encouraging workers to pledge presence at job

PLYWOOD PLEDGE boards placed on each and every machine along the production line at the Buffalo Shell Plant of the American Car & Foundry Company have cut absenteeism from 10 to 12 per cent, or from 9 to 8 per cent of total employment. Morris S. Evans, district manager, with Frederick A. Stevenson, president, worked out the novel solution to what was termed the one major production problem confronting the plant since it started making large caliber shells in 1940.

Each pledge board, measuring six by nine inches, bears the following sign:

### THIS BOARD FOR

#### ATTENDANCE DECLARATION

On this board will be placed a card which you are asked to check and sign, signifying whether you will help our fighting men by being on the job tomorrow, or whether you will hold up supplies for the front by being away from the job. The card will be collected an hour before the close of the shift. Your country needs your help.

On the card, which bears the national emblem, the following statement, to be checked and signed by each worker, appears: "Realizing the urgent need by our government for the large caliber shell we are making, I indicate below whether I will be at my work and on time."

When a worker says he will be absent, his foreman tries to dissuade him. If a worker is absent after signifying he would be on his job, he finds his card stamped "broken promise," and he is asked to appear before a board of the plant manager and other officials.

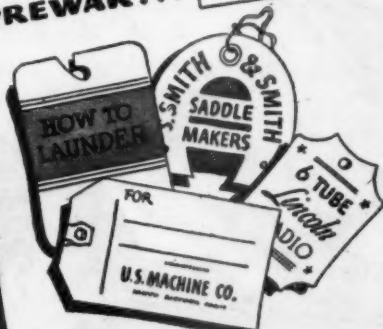
When an employee pleads illness, the company doctor does his best to remedy the condition. If family trouble is the cause advanced for absence, the company tries to straighten out the tangle.

Workers themselves chose their own battlecry, "Volume For Victory," and each wears a red, white and blue "V" pin bearing this battlecry emblazoned against a large caliber shell.

—JOHN WINTERS FLEMING

## YOU plan that Postwar Product.. Let DENNISON plan the Tag

### PREWAR...



Dennison Tags carried laundering instructions on gay fabrics; trade-marked horse collars; identified nationally advertised merchandise at the point of sale—and as Shipping Tags carried the shipper's identity to every spot on the earth where men eat and sleep and operate a business.

### WARTIME...



Dennison Tags, with ring and pin assemblies, help arm bombs for use; facilitate by color codes, the salvage of vital metal scrap; identify prisoners; furnish progressive records in the manufacture of carbines, half tracks and tanks—and expedite war production in hundreds of ways.

### POSTWAR...



Dennison Tags will be needed tomorrow for the solution of many problems now beginning to take form. You may need a tag with a fastening device you've never seen anywhere. You may need waterproof or acid-resisting stock—or tags with consecutively numbered coupons. Why wait? Start thinking now about the special jobs marking, shipping and production tags can do for you.

DON'T PUT IT OFF—PUT IT UP TO

# Dennison

1844

ONE HUNDREDTH YEAR

1944



Dennison experience and facilities have been multiplied and broadened by hundreds of specialized problems presented by war. Let Dennison plan today the tag that can be manufactured tomorrow. Write Dennison Manufacturing Co. 74J Ford Ave., Framingham, Mass.





## DAD, WHERE DO THE TRACKS GO?

"SON, if you walked those tracks west, you'd walk into a country so big you'd feel about knee high to a grasshopper.

"You'd see Indians sure—and cowboys, too—but you'd see lots of other things. Miles and miles of grain, more sheep than you ever counted—cattle galore; sky-scrapin' mountains that look like they had a hunk of ice cream on top of 'em.

"You'd see rushin' water turnin' factory wheels and changin' yellow waste country to land as green as our pasture; apples half as big as your head and trees as tall as Jack's bean stalk. You'd meet friendly people, livin' on farms and ranches and in up-and-comin' towns

and cities that ain't much older than you, as towns go.

"Finally, you'd wind up lookin' out over the Pacific Ocean—lookin' west to where your brother Jim is with his Marine outfit. Yes sir, if you'd walk those tracks west, you'd see a powerful lot of what Jim's fightin' for."

★ ★ ★

The Milwaukee Road tracks lead to new opportunities. You can choose your climate and scenery—the type of endeavor you're fitted for. Live in old established communities or pioneer in "young" country. If you're thinking of making a move in the post-war days look to the west and northwest!



11,000-MILE SUPPLY LINE FOR WAR AND HOME FRONTS

# Capital Scenes... and What's Behind Them



## Skulduggery in war

ENGLISHMEN like to say that their men learned war on the playing fields of Eton. The idea seems to be that the sturdy Briton might swallow bootheels for the first few chukkers—wrong simile; but it sounds nice—but wins in the end because he is indestructible.

"How about our football teams in the little jerkwater colleges?" asked a general who recently returned from Normandy. "In the book they haven't a chance against the big college herds. They catch their material in the cornfields, assemble enough huskies to make a Bible class, dodge faculty detectives who look for such extra inducements as sweaters and free board, pay their coaches about as much as a motorman, play their men with broken collarbones because they have no spares—"

So they win every now and then, he said. The evidence is against them, but they win. When the Allies first slammed into Normandy the Jerries had more men in the line, more guns, all the roads, perfect defensive positions. All the big college stuff. They are tough soldiers and hard to beat. But our side used small college tactics, and when we couldn't beat 'em we fooled 'em. Next game in the Berlin bowl.

## Echo from the past

IT MADE him think of Kid McCoy, said the general. When the Kid was good he was fast, clever, and had a punch like an axe. One night the super-Goliath he was fighting quit cold in the middle of the fifth round and leaned over the ropes. "Go wan," yelled his second. "Go wan in there and smash McCoy." "Which McCoy?" asked the giant.

## Prisoners of war

THE Army would not admit that its prisoner of war affairs have been complicated by tender persons who grieve for the poor boys. The Articles of War would forbid such an admission. The Army will say that it would never willingly let the P.W.'s go to the movies or to dances or go visiting in town.

The Army, in fact, sustains a marked rise in decibels when it hears these stories. A decibel is a factor in the measurement of sound.

Nevertheless a great many civilians

are urging right now that an easy peace be granted Germany. As yet their urgings have been rebuffed. The Army fears that, when peace finally comes, the civilians will forget how many American soldiers have been killed under cover of a white flag.

## Casual report on Stalin

LOOKOUTS here think that Stalin will write that part of the peace that affects Russia. If the other Allies want to come in on his terms he will give them chairs. In any case he'll write it.

"When the war is over Russia will want to do business with Germany. Both have markets to offer and things to sell. There is no reason to think that Russia will demand the dismemberment of Germany except to take the territory needed to make Russia's frontiers secure."

The British are reported to be unhappy at this prospect. It is observed that we will want to do business with Russia and ultimately with Germany and are not as a people greatly interested in the political control of Europe. The conclusion is that Congress will insist that a treaty be signed and that business prospects will be considered when the instrument is framed.

## Signs of fairing weather

A "THREE minute version" of an hourglass was placed on the desk of each officer at Army H.Q. in Atlanta. Long distance calls dropped 52 per cent. The Army is hunting for square pegs in round holes. Engineers who can build bridges have been found in cook details. Men who are fit for the Rangers have been found on trucks. A race driver has been spotting for planes. The Maritime Service has discovered that officers badly needed on cargo ships have been refused their papers because of red tape.

These things should not irritate unduly.

The significance is that time is now being found to correct the mistakes inevitable in a program the like of which has never been known for magnitude and speed.

## A taste of blood?

SOME officers in the buying end of the Army think that, when reconversion

comes, small business will be in a better position than big business. The reasoning is that thousands of men operating small plants were content before the war. Now their sights have been raised. One man who did a \$5,000 annual business grinding crystals reported an intake of \$2,500,000 last year making precision parts on a production line basis. One man had a little gadget he had worked out at home. When he showed it to the War Department in competition with representatives of big corporations he was not allowed to go home or take away his gadget. He was in business over his ears right away. A cleaner of glassware ran his business from \$40,000 to \$250,000. Another who had ten employees before the war now uses 40. A man in Philadelphia who worked in overalls before the war while his wife kept the books and the kids played in the yard turned over \$400,000. Another who did a \$78,000 business in 1941 took in \$1,990,000 in 1943.

The proponents of the theory admit that Big Business must provide the market when Government's war buying ceases. But they argue that these small men have had an uplift that has changed their psychology. They will never again be content with a penny business.

## The end seems nearer

"FOR example: The Navy figured that we could take two named islands in two months. But we were able to take the two in one month by amplifying our attack. We used more shells and bombs than we had planned to do. They must be made up."



Under the circumstances it seems unlikely that Mamma will get that new icebox she has been crying for. Only non-essential materials will go into civilian production.

"Don't measure our successes by islands and square miles," the fighting forces warn. "The true measure is dead Japs and Germans."

The day the war against Germany ends, the need for fighting tools will be cut by 50 per cent. That's an official estimate.

## A postwar employment—

A PURELY unauthorized estimate by a clerk in the Department of Archives is that, if all the significant records were sorted out, indexed, and properly filed, one ambitious historian might be able to read them all in about 400 years. Documents are still coming in from the Revolutionary War and the War of 1812. The Spanish War and the Civil War provide carloads of important papers. The surface of the First World War has been barely scratched. The Indian wars, the story of colonial days, the story of the West, the prosperity, decline and recovery of the South each offers gen-





Another Reason for remembering  
OHMER when you make your  
plans for peace



## The Cash Register with the "BUILT-IN" BOOKKEEPER

THIS locked-in printed record is an infallible source of information and protection. The register prints the amount of each sale on this record in order of occurrence. It numbers each sale automatically. It designates the clerk who handled each sale, shows into which total each sale has been registered. It dates every transaction. It gives you a printed grand total at the end of the day and provides a total reset number to enforce correct reading of the total. It prevents unauthorized resetting of the grand total.

In brief it's the most accomplished "built-in" bookkeeper offered in any cash register.

Naturally, you can't expect to purchase a new OHMER Cash Register today, but it will pay you to remember this feature, and the scores of other OHMER features, in preparation for increased profit protection through all the post-war years.

OHMER REGISTER CO., DAYTON 1, OHIO

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CASH REGISTERS for every type of retail store  
FARE REGISTERS and TAXIMETERS for transportation  
TOOL CONTROL REGISTER SYSTEMS for industry

MANUFACTURERS OF REGISTERING  
EQUIPMENT SINCE 1898

erations of happy toil to those who enjoy that kind of work.

And in the meantime—

There are 2,000,000 drawers full of records of this war in one department of the Army which the Law directs must be classified and disposed of. There are other departments in the Army. There are the Navy and the Coast Guard and the Marines—

Who says we may be idle when peace finally comes?

## Some gossip from Valhalla

UNDER the practically ancestral Dumbarton Oaks—some of the trees might date back to Pocahontas and the King of the Gypsies, who came over from Cornwall to confuse early Potomac genealogists—various subchiefs of state representing the dominant Allies have been meeting. Their assignment is to work



out some means by which the hand can be put on any nation that may threaten to be a nuisance in the future.

In the matter of South America, for example.

Suppose that Brazil, which has been our very good friend, and Chile, which has been our pretty good friend, should plan to shake the teeth out of Argentina, which has not been our friend at all. Should we move in to the rescue? If we did, what might the 20 other South American countries say about it? Or do about it? If we called in the constables of a World Police Force, just to make the demonstration impressive, in which ashcan would the Monroe Doctrine land?

## Other thorns on the bush

WHEN Germany has been smashed, and no matter what may come later, the smashing will be thorough, there will be revolutionary movements in the countries which have been occupied. The peoples who have been maltreated will have scores to settle with the quislings. Not all of the governments in exile are in good standing at home.

The dominant Allies plan to maintain order in these countries.

As a practical necessity it may be necessary to treat with men who control what is left of the machinery of government. The unpleasant corollary is that the partisan patriots may be the enemy. In one country the men with whom the Allies must work have been unquestionably loyal. But, before the war, the inefficiency of their government had almost assured a revolution.

Just a glimpse of the troubles under the Dumbarton Oaks.

## An "Invincible Competitor"

PERSONS who might be interested during the days to come in doing business, paying dividends, hiring workers, rent, insurance, and the other incidents

of competitive activity will note that Senator Byrd's Committee on Government Corporations reports that:

"There are 44 corporations—liabilities \$16,500,000,000—value of assets will not be known for years to come—borrowing power \$33,000,000,000—plus outstanding loans of \$6,500,000,000—current loss \$103,000,000—70,000 employees scattered all over the world—for the most part no current control by Congress, Treasury, Budget, or General Accounting Office—most are perpetual—to be wound up only when dissolved—to a great degree do business in competition with private business—business meets an invincible competitor—the corporations have practically unlimited government credit at low rates—in some cases freedom from all taxes except on real estate—have privilege of penalty mail—and the prestige of government agencies—"

Alone or in certain groups they are autonomous. They are the Kings of the Cannibal Islands.

Prophecy: And So What?

## Sleepless vigilance of nobody

DURING the First War the U. S. Spruce Production Corporation was organized for the purpose of getting spruce timber for airplanes. Planes are now being built of aluminum alloys and steel. The Spruce Corporation has been in the process of liquidation for 25 years.



## A tag to Byrd's report

COL. O. S. MCGUIRE was once chairman of the committee of the American Bar Association which framed a law for the control of the Government's administrative agencies. (Logan-Walter bill and others). So he is interested in the changing form of government:

"A trucking contractor I know has for years been paying an extra wage to the men who handle trailers. The NLRB law specifically states that an employer may continue to pay the wages he had been paying prior to Sept. 15, 1942. But he has been warned that, by paying this extra to the trailer-haulers he is infringing the regulations of the NLR Board. "This is the law", he has replied in effect. "See. Look in the book. There it stands—"

An attorney for the NLRB told him that, if he continued to prefer the law to the regulations of the Board, he might get into trouble with the Internal Revenue assessors and with the Department of Justice. Nothing, however, was said about the courts. The trucker is standing pat.

Herbert Core